PatBase - Search results 06 March 2018
Search query: FT=((PACKAGE OR BOX OR BAG OR CONTAINER) AND (OPENABLE OR SEALABLE OR RESEALABLE) AND (STAMP OR CLOSURE OR TAG OR LABEL OR TAB) AND (DISPENSING OR STORAGE OR COVER OR PACKAGING OR UNIT) AND (SEALING~ OR OPENING~))
Results: 500

Search history

Search 1: FT=(MEDICAL~ AND CONNECTOR~ AND COUPLING~ AND FLUID~ AND LINES~ AND INJECTION~ AND INJECTOR~ AND APPARATUS~ AND DEVICE~) (Results 1199)

Search 2: FT=(MEDICAL~ AND (CONNECT~ OR COUPL~) AND FLUID~ AND LINES~ AND (INJECTION~ OR INJECTOR~) AND (APPARATUS~ OR DEVICE~)) (Results 81945)

Search 3: (2) (Results 81945)

Search 4: [SP]: fluid connection assembly with locking mechanism in general, this disclosure relates to techniques for implementation and use of a fluid connection assembly, having a locking mechanism, which may be connected to a medical fluid injection device. an example fluid connection assembly includes at least one fluid connector, a mating mechanism coupled to the at least one fluid connector and configured to connect the at least one fluid connector to a medical fluid injection device, and a locking mechanism coupled to the mating mechanism and movable into a locked position or an unlocked position. in this example, the fluid connection assembly becomes affirmatively coupled with the medical fluid injection device when the locking mechanism is in the locked position, and the fluid connection assembly becomes removably decoupled from the medical fluid injection device when the locking mechanism is in the unlocked position. (Results 16)

Search 5: [SP]: related application this application is a continuation of u.s. application ser. no. 12/324,512 filed nov. 26, 2008 which is hereby expressly incorporated by reference. technical field this disclosure generally relates to the connection of components to a medical fluid injection device. background medical fluid injection devices are typically used to inject medical fluid into a patient. these devices often include one or more reservoirs to hold the medical fluid, and one or more pressurizing units to inject the medical fluid into the patient. for example, a contrast media powered injection device may include a reservoir containing contrast media and a syringe that is used to inject the contrast media into the patient. the contrast media injection device may be used during certain medical procedures, such as an angiographic or computed tomography (ct) procedure.many medical fluid injection devices include one or more syringes to inject fluid. a syringe has a chamber for holding the fluid and a plunger that is moveable within the chamber. the fluid is typically drawn into the chamber from a fluid reservoir when the plunger is moved in a first direction. the fluid is then expelled from the chamber and into the patient when the plunger is moved in a second, opposite direction. the fluid is delivered at a rate that may be determined by a speed of movement of the plunger.in many cases, fluid may be injected from a medical fluid injection device into a patient via a patient line, or tubing kit, that is connected to the injection device. in certain cases, the patient line may comprise a disposable component. for example, at the beginning of an injection procedure, a clinician may connect a sterilized patient line to the injection device. upon completion of the injection procedure, the clinician may then disconnect the patient line from the injection device, and subsequently dispose of the patient line. the clinician may then use a new patient line, or tubing kit, for a subsequent injection procedure. summary in general, this disclosure relates to techniques for implementation and use of a fluid connection assembly, having a locking mechanism, which may be connected to a medical fluid injection device. the fluid connection assembly may comprise a sterilized, disposable component that may be connected to a non-sterilized injection device. in some cases, a clinician may use a one-handed manual insertion procedure to connect the fluid connection assembly, which may be part of a patient line, to the injection device. in these cases, the clinician may be able to maintain sterility while making this connection.in one embodiment, an example fluid connection assembly includes at least one fluid connector, a mating mechanism coupled to the at least one fluid connector and configured to connect the at least one fluid connector to a medical fluid injection device, and a locking mechanism coupled to the mating mechanism and movable into a locked position or an unlocked position. the fluid connection assembly becomes affirmatively coupled to the medical fluid injection device when the locking mechanism is in the locked position. the fluid connection assembly becomes removably decoupled from the medical fluid injection device when the locking mechanism is in the unlocked position.in one embodiment, an example method includes connecting at least one fluid connector of a fluid connection assembly to a medical fluid injection device, moving a locking mechanism of the fluid connection assembly into a locked position to affirmatively couple the fluid connection assembly to the medical fluid injection device, and moving the locking mechanism of the fluid connection assembly into an unlocked position to removably decouple the fluid connection assembly from the medical fluid injection device.in one embodiment, an example fluid connection assembly includes a connecting means for connecting the fluid connection assembly to a medical fluid injection device, a locking means for affirmatively coupling the fluid connection assembly with the medical fluid injection device, and an unlocking means for removably decoupling the fluid connection assembly from the medical fluid injection device.the details of one or more embodiments are set forth in the accompanying drawings and the description below. other features, objects, and advantages will be apparent from the description and drawings, and from the claims. brief description of drawings fig. 1a is a perspective diagram of one embodiment of a powered medical fluid injection device that may be connected to a fluid connection assembly. fig. 1b is a perspective diagram of one embodiment of the powered medical fluid injection device of fig. 1a connected to various components, including fluid reservoirs and tubing. figs. 2a-2e are various perspective diagrams of another embodiment of a powered medical fluid injection device, or device components, that may be connected to a fluid connection assembly. fig. 3 is a perspective diagram of an example syringe that may be used with a powered medical fluid injection device, according to one embodiment. fig. 4 is a perspective diagram of a patient line that may be used with a powered medical fluid injection device, according to one embodiment. figs. 5a-5d are perspective diagrams of a fluid connection assembly that may be connected to a powered medical fluid injection device, according to one embodiment. fig. 6 is a perspective diagram of certain components of the fluid connection assembly shown in figs. 5a-5d, where a locking mechanism has been moved into a different position, according to one embodiment. figs. 7a-7c are perspective diagrams of a locking mechanism included in the fluid connection assembly shown in figs. 5a-5d, according to one embodiment. fig. 8 is a flow diagram of a method that may be performed to connect the fluid connection assembly shown in figs. 5a-5d to a powered medical fluid injection device, according to one embodiment. detailed description fig. 1a is a perspective diagram of one embodiment of a powered medical fluid injection device 100 that may be connected to a fluid connection assembly. in the embodiment of fig. 1a, the pressurizing unit within sleeve 108 is a syringe. in other embodiments, other forms of pressurizing units may be used, including other types of positive displacement pumps. device 100 is, in some embodiments, used to inject medical fluid, such as contrast media or saline, into a patient during a medical procedure, such as an angiographic or computed tomography (ct) procedure.device 100 includes a control panel 102, an injector head 104, a sleeve 108 to hold a pressurizing unit, a reservoir holder 110, a module 112, a patient manifold sensor 114, and an air detector 116. injector head 104 includes a pump 106 and also includes one or more processors used to control and/or monitor injector head 104, control panel 102, the pressurizing unit within sleeve 108, patient manifold sensor 114, and air detector 116 of device 100. reservoir holder 110 is capable of holding a fluid reservoir that contains an amount of fluid to be drawn into the syringe during operation of device 100. for example, reservoir holder 110 may hold a reservoir of contrast media or diluent. a second reservoir holder (not shown) may hold a diluent (e.g., saline) for use in pump 106. fig. 3 shows an example of a syringe that may be used within sleeve 108, according to one embodiment. patient manifold sensor 114 may, in some cases, be connected to a patient manifold, as will be described in reference to fig. 1b.an operator of device 100, such as a clinician, may use control panel 102 to set up various parameters and/or protocols to be used for a given injection procedure. for example, the operator may interact with control panel 102 to enter injection parameters for flow rate, maximum injection volume, maximum injection pressure, rise time, or other parameters. in one embodiment, control panel 102 includes a touch-screen panel.pump 106 is capable of pumping fluid. in one embodiment, pump 106 is a peristaltic pump. in this embodiment, tubing and a fluid reservoir (not shown) are coupled to and through pump 106. pump 106 pumps fluid from the fluid reservoir through the tubing towards module 112. in the example of fig. 1a, both pump 106 and the syringe contained within sleeve 108 are capable of delivering fluid from device 100 into a catheter. pump 106 is driven by a motor that is part of pump 106, and the plunger within the syringe is driven by a motor assembly, including an actuator, that is part of injector head 104. in one embodiment, injector head 104 includes a processor that drives the motor assembly.in one embodiment, reservoir holder 110 holds a fluid reservoir that is coupled to input fluid tubing. this input fluid tubing is coupled to the syringe, such that when the plunger within the syringe is moved in a first direction by the motor, fluid is drawn from the reservoir into the syringe. the syringe within sleeve 108 is further coupled to output tubing. when the plunger within the syringe is moved in a second, opposite direction, fluid is expelled out of the syringe into the output tubing. in one embodiment, the syringe is a dual-port syringe, such that the input tubing is coupled to one port of the syringe, and the output tubing is coupled to another port of the syringe. fig. 3 shows an exa (Results 16)

Search 6: FT=((PACKAGE OR BOX OR BAG OR CONTAINER) AND (OPENABLE OR SEALABLE OR RESEALABLE) AND (STAMP OR CLOSURE OR TAG OR LABEL OR TAB) AND (DISPENSING OR STORAGE OR COVER OR PACKAGING OR UNIT) AND (SEALING~ OR OPENING~)) (Results 36112)

Search 7: [SP]: resealable packaging container with interior mounted pressure sensitive coated collar a resealable packaging container for housing goods includes a wrapper of a flexible material that encloses the goods within. a perforated panel is cut into the wrapper for movement between open and closed positions. the perforated panel defines a wrapper opening in the wrapper when the perforated panel is in the open

position to allow access to the goods disposed within the resealable packaging container. a pressure sensitive coated collar adhesively engages the inner surface of the wrapper underneath the perforated panel to partially surround the wrapper opening. the pressure sensitive coated collar includes an open central portion that is disposed inwardly of the wrapper opening and an exposed region that extends between the wrapper opening and the open central portion. the perforated panel reseals to the exposed region of the pressure sensitive coated collar in the closed position. (Results 10)

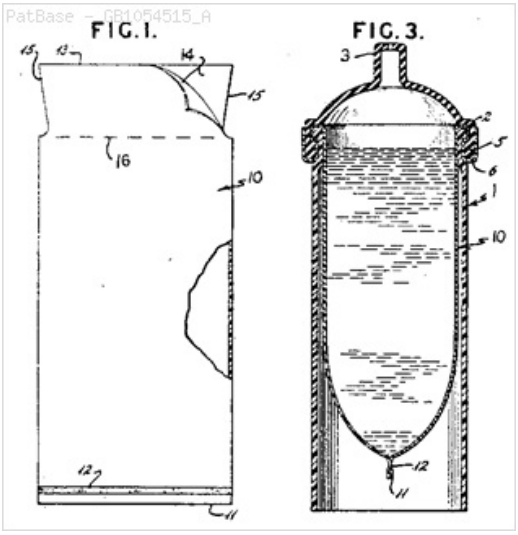
Search 8: [SP]: wiederverschliessbare verpackung die vorliegende erfindung betrifft eine wiederverschliessbare verpackung aus zwei miteinander verbundenen verpackungselementen x und y, wovon eines der beiden verpackungselemente eine mehrschichtfolie, umfassend eine siegelschicht a), eine damit direkt oder indirekt verbundene haftklebstoffschicht c) und eine traegerschicht b), und das zweite verpackungselement ein filmfoermiges kunststoffmaterial mit oder ohne siegelschicht aufweist, wobei die beiden verpackungselemente x und y ueber ein versiegeln der siegelschicht(en) derart miteinander verbunden sind, dass im siegelnahtbereich die verbundhaftung zwischen der siegelschicht a) und der siegelschicht des bzw. dem filmfoermigen kunststoffmaterial des zweiten verpackungselementes groesser ist als die verbundhaftung zwischen der haftklebstoffschicht c) und der siegelschicht a) bzw. einer schichtfolge, umfassend die siegelschicht a), bzw. diese verbundhaftung auch groesser ist als die verbundhaftung zwischen der haftklebstoffschicht c) und der an diese schicht angrenzenden traegerschicht b) bzw. die kohaesion der haftklebstoffschicht c) jeweils kleiner ist als jede der genannten verbundhaftungen, wodurch beim ersten oeffnen der verpackung die versiegelte siegelschicht a) sich im siegelnahtbereich von einem zumindest teilschichtstueck der haftklebstoffschicht c) abloest bzw. zumindest ein teilschichtstueck auf der versiegelten siegelschicht verbleibt, der haftklebstoff dort freigelegt und nach entnahme eines teils des fuellgutes ein... (Results 23)

Search 9: [SP]: storing and dispensing container for product a storing and dispensing container for product. the container includes a flexible pouch for storing product. a rigid flip top, having a lid connected to a flange by a hinge, is affixed to an outer surface of the pouch at the top portion of the pouch surrounding a removable portion of the pouch. the flange forms a dispensing orifice through which the product can be dispensed when the lid is opened. the lid is removably positionable to seal the pouch at the outer surface when the lid is closed upon the flange. (Results 438)

1) Family number: 23109815 (GB1054515A)

Title:	F e e d i n g bottles.
Family:	**Publication number** / **Publication date** / **Application number** / **Application date** GB1054515 A / 00000000 / / 00000000
International class (IPC 8-9):	A61J9/00 (Advanced/Invention); A61J9/00 (Core/Invention)
International class (IPC 1-7):	A61J9/00
CPC:	A61J9/001
European class:	A61J9/00A
Classification Explorer	
Forward Citations:	EP0332341, EP0068653,

Abstract:
Source: GB1054515A 1,054,515. F e e d i n g bottles. INTERNATIONAL LATEX COROPORATION. April 30, 1964, No. 18086/64. Heading A5X. [Also in Division B8] A baby's feeding bottle is of the kind wherein a disposable flexible **bag** 10 is supported in a cylindrical holder 1 and is secured by a **cover** having a teat 3, the **bag** having been provided at its mouth with lines of weakening to allow parts of the **bag** to be removed to provide handling **tabs** 14. The mouth of the **bag** may be temporarily heat-**sealed** to maintain the inside sterile. Two, three, or four **tabs** may be provided on each **bag** and perforations 16 allow the removal of the **tabs** after the **bag** is assembled to the holder. A stiffening rib may be provided on each **tab**. The **bag** is of exemplified synthetic plastics materials or is of natural or synthetic rubber and it may be formed as a series of **bags** separated from each other by lines of weakening and individually heat-**sealed**. The series of **bags** may be provided by **bags** joined side by side, Fig. 5 (not shown), or end to end, Fig. 4 (not shown).



2) Family number: 19999276 (US1798142A)

Title:	Hypodermic syringe
Priority:	US19240689518 19240130 US19280263670 19280322 US19280263671 19280322

Family:

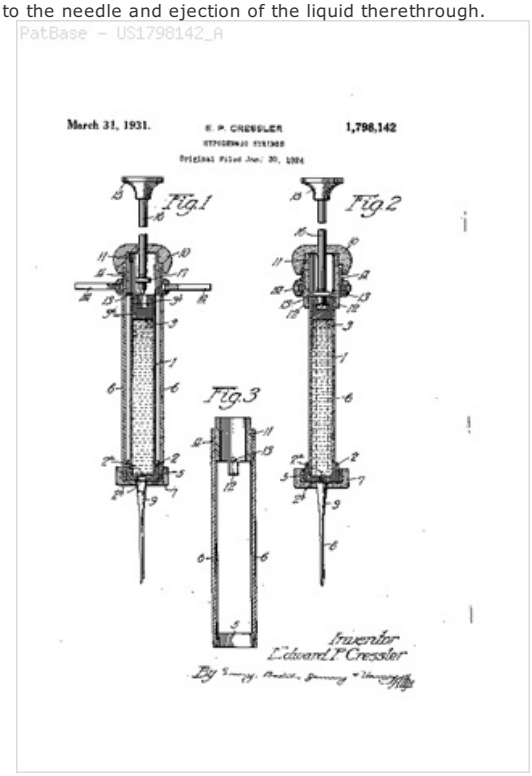
Publication number	Publication date	Application number	Application date
US1712069 A	19290507	US19280263670	19280322
US1712070 A	19290507	US19240689518	19240130
US1798142 A	19310331	US19280263671	19280322

Probable Assignee:	COOK LAB INC
Assignee(s):(std):	COOK LAB INC
Assignee(s):	COOK LABORATORIES INC
Inventor(s):(std):	CRESSLER EDWARD P
International class (IPC 8-9):	A61M5/24 (Advanced/Invention); A61M5/24 (Core/Invention)
International class (IPC 1-7):	A61M5/24
CPC:	A61M5/24 A61M2005/2414 A61M2005/2437 A61M5/347 A61M2005/2407 A61M2005/3139
European class:	A61M5/24 K61M5/24A2 K61M5/24A6 K61M5/24F2 K61M5/31C4C K61M5/34E
US class:	285/376 604/237

Classification Explorer

Forward Citations: WO09126436, US9302049, US8641416, US8597269, US8303548, US4883466, US4425122, US4390016, US4281653, US3583399, US3501176, US3255752, US3102539, US3091240, US3089490, US3084688, US3080866, US2941529, US2904043, US2842126, US2834346, US2764978, US2695613, US2672142, US2648334, US2555878, US2531667, US2524363, US2524362, US2017043094, US2014052074, US2009259209, US2009047622, US2005233277, EP2018884, DE2939180, DE1059151, DE102007034477,

Abstract:
Source: US1798142A 1. A hypodermic syringe embodying a cartridge and associated needle, said cartridge comprising a liquid-containing tube having a rear piston plug and a fore scaling **closure** of resilient material and said needle having a funnel extension held against said **closure**, the said **closure** having a normally closed passage openahle by pressure imposed on the liquid to establish communication between the liquid and the needle; with a cartridge holder having said needle removably affixed thereto in operative relation to said cartridge, said holder embodying an abutment for the fore cartridge **closure** and screw-actuated means protruding into the holder against the rear end of the Cartridge tube, whereby the cartridge may be clamped between said serew~actuated means and fore abutment with the said fore **closure** cushioning the fore end of the cartridge tube; and means to force in the piston plug to cause **opening**' of the passage to the needle and ejection of the liquid therethrough.



3) Family number: 19861696 (US1721494A)

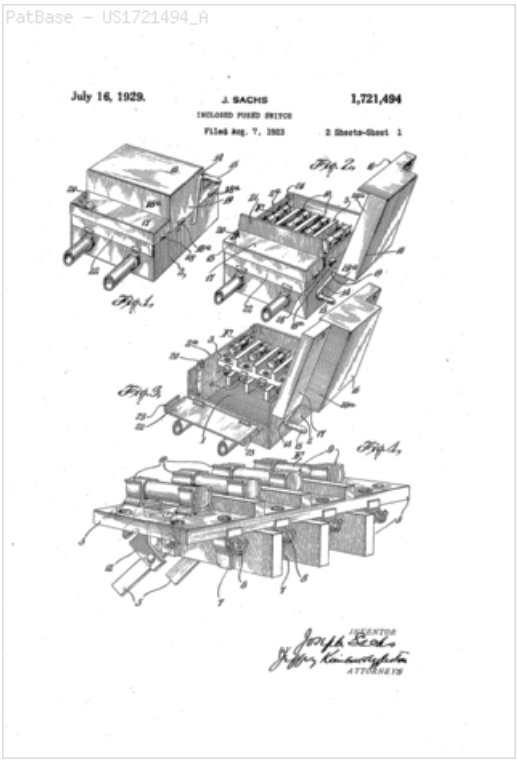
Title:	INCLOSED FUSED SWITCH
Priority:	US19230656182 19230807

Family:

Publication number	Publication date	Application number	Application date
US1721494 A	19290716	US19230656182	19230807

Probable Assignee:	JOSEPH SACHS
Assignee(s):(std):	JOSEPH SACHS
Inventor(s):(std):	JOSEPH SACHS
Inventor(s):	SACHS JOSEPH
International class (IPC 8-9):	H01H9/10 (Advanced/Invention); H01H9/00 (Core/Invention)
International class (IPC 1-7):	H01H85/00
CPC:	H01H9/10
European class:	H01H9/10
US class:	200/50.03 200/50.13
Classification Explorer	
Forward Citations:	US3368053,

Abstract:
Source: US1721494A 1. A- fused switch comprising in combination, an inclosing **box**, fuse contacts in the **box**, a, switch in thc **box**, an **openable** front **cover** serving when closed to prevent uccess to the switch while permitting access to the fuse contacts, additional front **cover** means normally serving to prevent access to the fuse contacts and movable independently of thc first said **cover** to permit such access, the said covcr means including a laterally movable portion which, whenever the first said **cover** is closed and the said **cover** means is in access permitting position, projects at one sideof tho **box**, and an cxterior switch operating handle having at least a part thereof adjacent the wall of the **box** at the last said side thereof and movable from switch **opening**; position to switch closing position in a path which is directly obstructed by the said portion of the fuse **cover** means when projecting ns aforesaid, the said side part of the handle when in switch closing position directly obstructing movement of the said laterally movable portion of the fuse **cover** means so as to prevent movement of the said means to access permitting position. -



4) Family number: 21433636 (US1917517A)

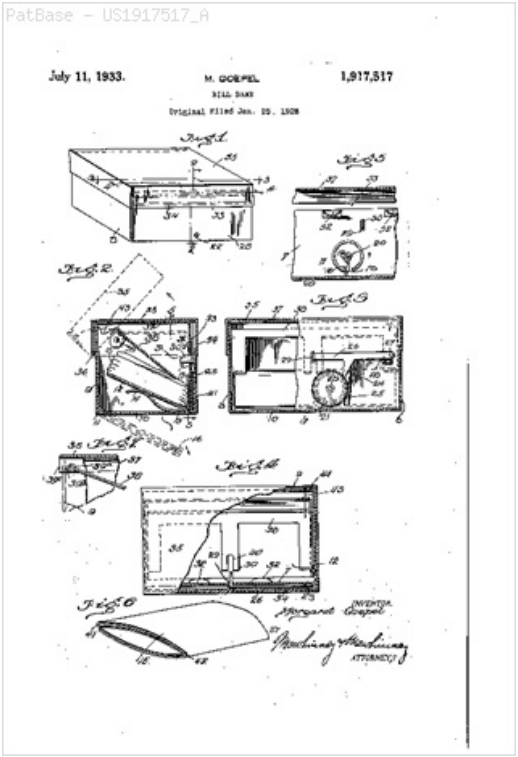
Title:	Bill bank
Priority:	US19280249436 19280125 US19290400292 19291017

Family:

Publication number	Publication date	Application number	Application date
US1760901 A	19300603	US19280249436	19280125
US1917517 A	19330711	US19290400292	19291017

Probable Assignee:	MARGARET GOEPEL
Assignee(s):(std):	MARGARET GOEPEL
Inventor(s):(std):	MARGARET GOEPEL
Inventor(s):	GOEPEL MARGARET
International class (IPC 8-9):	A45C1/12 (Advanced/Invention); A45C1/00 (Core/Invention)
International class (IPC 1-7):	A45C1/12 G06K17/00
CPC:	A45C1/12
European class:	A45C1/12
US class:	100/233 100/244 194/206 194/225 232/43.3 232/4R
Classification Explorer	
Forward Citations:	US4765607, US3285505, US3074663, US2936916, US2814436, US2718726,

Abstract:
Source: US1917517A 1. In a bank of the type having a **container** with a follower therein and a **closure** with a hook thereon; a ring mounted on the **container** for engagement with the hook of the **closure** and provided with a gap therein for releasing the hook when the ring is turned to register the gap with the hook, a ratchet wheel connected to the ring for turning the same, and a lever pivoted to the **container** normally urged in one direction and having a pawl for engagement with said ratchet Wheel, said lever having an inturned end lying in the path of said follower for engagement by the money moved bythe follower to swing the lever and turn the ratchet wheel and ring to release said hook. » 2, In a 'bank of the type having a closed **container** for money and a hinged bottom on the **container** with a hook on the bottom, a locking ring mount-cd for rotation on the **container** and engaging the hook at times, and means operable on the ring and lying in the path of the money deposited in the bank and adapted to be actuated by the money to turn said ring and release said hook. ' 3, In a bank of the type having a closed **container** for bills with a follower in said **container** :tor stacking the bills and a hinged **closure** for the **container** having a latch member; a cooperating latch element movably mounted on the **container** for holding the **closure** closed, and means operable by the bills engaged by the follower for actuating said latch element for releasing the **closure**. In testimony whereof I ai"i;ix mv signature



5) Family number: 19834264 (US1970244A)

Title:	ELECTRIC SWITCH
Priority:	US19320601525 19320328

Family:

Publication number	Publication date	Application number	Application date
US1970244 A	19340814	US19320601525	19320328

Probable Assignee:	CUTLER HAMMER INC
Assignee(s):(std):	CUTLER HAMMER INC
Inventor(s):(std):	MILLERMASTER RALPH A
International class (IPC 8-9):	H01H9/10 (Advanced/Invention); H01H9/00 (Core/Invention)
International class (IPC 1-7):	H02B1/08
CPC:	H01H9/104
European class:	H01H9/10C
US class:	200/50.13

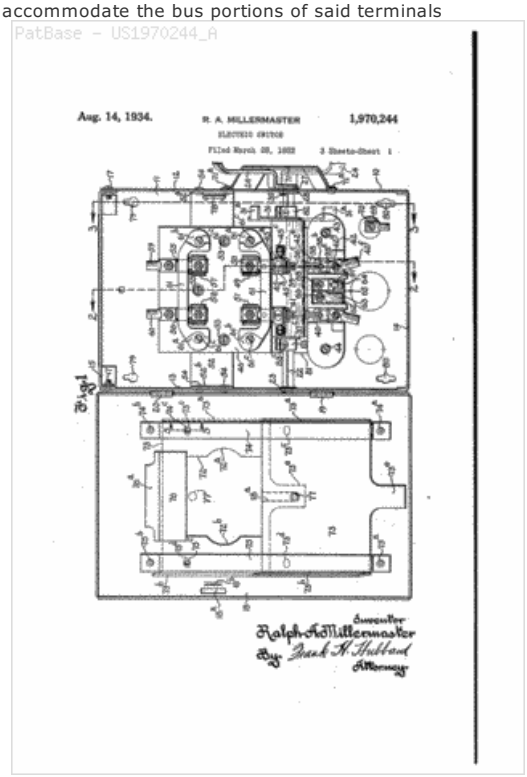
Classification Explorer

Abstract:
Source: US1970244A What I claim as new and desire to secure by Letters Patent is: . 1. In an electric switch, in combination, an operating shaft oi' angular cross section, a- tubular insulating member of similar cross section slidably mounted upon said shaft, a flat punched sheet metal contactor slidably engaging said insulating member and interlocked therewith for rotation thereby, a pair of molded insulating :nembers arranged on opposite sides of said contact member and adapted to expose the blade-pon tions of the latter, said last mentioned insulating members also having interlocking engagement with said nrst mentioned insulating :nember, and clamping means for restraining said parts from substantial movement longitudinally of said shaft. 2. In an electric switch, in combination, an operating shaft of substantially rectangular cross section throughout the major portion of the length thereof, a lever secured to one end of said shaft, a tubular member formed of insulating niaterial of the plienol-formaldehyde condensation type, said insulating member being of rectangular cross section to slidably engage said shaft and to inteiflocIt therewith for rotation thereby, a. plurality of Eat punched sheet metal contactors and a plurality of molded insulating members arranged on opposite sides of and between said ccntactors, said contactors and said last mentioned insulating members having rectangular **openings** to provide for sliding engagement and interlocking thereof with said first mentioned insulating member, all of said parts being simultaneously adjustable longitudinally of said shaft, and a pair of clamping devices engaging said shaft and arranged at opposite ends of said parts to retain the latter in adjusted position with respect to said shaft. 3. In an electric switch, `in combination, an operating shaft of substantially rectangular cross section throughout the major portion of the length thereof, a one-piece **stamped** sheet metal actuating lever having a rectangular **opening** formed therein to snugly ni over said shaft in a relation substantially Hush with one end. of the latter, said lever being welded to said shaft at points intermediate the width of the four flat sides of the latter whereby said parts are rigidly and permanently **united** to eachother, a sheet metal casing having a circular **opening** in one side wall thereof to accommodate said shaft and to provide a. bearing for the rectangular portion thereof adjacent to said lever, 2. Washer strung upon said shaft and arranged against the outer surface of said side wall and against the inner surface of said lever, a second washer strung upon said shaft and arranged against the inner surface of said side wall, said shaft having a transverse passage located In a plane adjacent to the inner surface of said last mentionedvvasher,aremovable element penetrating said passage and adapted to maintain saidshaft in assembled relation to said bearing **opening**, the other end of said shaft having a reduced end of cylindrical contour, and the other side wall of said casing having a circular **opening** alined with said iirst mentioned **opening** and adapted to provide a, bearing for the last mentioned end of said shaft. ~ 4. In an electric switch, in combination, a boxlike sheet metal _casing having alined bearing **openings** formed in opposite side walls thereof, ' an operating shaft of rectangular cross section insertable into said casing through one of said bearing **openings**, a punched and **stamped** sheet metal member having a recte.ng'o_la1' **opening** and a tubular insulating member of rectangular cross section to be strung sequentially upon said shaft, said sheet metal member being adapted to provide 27, releasable interlocking,connection with one of the casing parts, a plinality of molded insulating cylinolers and 9. plurality of punched sheet metal contactors interposed therebetween and spaced thereby, each of said cylinders and said contactors having a rectangular **opening** therethrough to provide for interloclcing engagement thereof with said insulating tube, all ofsaid parts being normally adjustable as a group longitudinally of said shaft to bring the same into registry With other parts of the switch, a pair of clamping devices engaging said shaft at opposite ends of said group of parts to restrain the latter against movement longitudinally of said shaft, said sha-it having a reduced cylindrical end to engage the other of said bearing **openings**, and means associated with said shaft to normally prevent ,longitudinal displacement ssthereof in either direction with respect to said side walls of the casing. - electric switch, in combination, a boxmetal casing having alined bearing 5. In an like sheet **openings** formed in opposite side Walls thereof, an operating shaft of rectangular cross section insertable into said casing through one of said bearing **openings**, a punched and **stamped** sheet metal member having a rectangular **opening** and a tubular -insulating member of rectangular cross section to be strong sequentially upon said shaft, said sheet metal member being adapted to provide SL releasable interlocking connection with one of the casing parts, a plurality of molded insulating cylinders and a plurality of punched sheet metal contactors interposed therebetween and spaced thereby, each of said cylinders and said contactors having a rectangular **opening** therethroligh to provide for interlocking engagement thereof with said insulating tube, all of said parts being normally adjustable as a group longitudinally of said shaft to bring the sanie into registry with other parts of the switch, a pair of clamping devices engaging said shaft at opposite ends of said group of parts to restrain the latter against movement longitudinally of said shaft, said shaft having a reduced cylindrical end to engage the other of said bearing **openings**, and means associated with said shaft to normally prevent longitudinal displacement thereof in either direction with respect to said side Walls of the casing, said means including means reinovalale from said shaft to permit longitudinal displacement of the latter in one direction at will. 6. In an electric switch, in combination, a boxlike sheet metal casing having bottom, side and end Walls and an **openable** **cover**, a shaft having the major portion of the length thereof of square cross section, said side walls having alined onenings to provide for endvvise insertion of said shaft S0 into said casing for bearing engagement with said **openings**, a tubular insulating member of square cross section slidable onto said shaft, 9. plurality of flat pxuiched sheet metal contactors slidable onto said insulating member and inte1'l_lt;Jcke_lt;1 therewith for rotation thereby, a, plurality of molded insulating cylinders also interlocked with said insulating member and amrangecl on opposite sides of and between said contactors to space the latter relatively to each other and to assist in insulating the same, each of said contactors having a pair of arms extending radially beyond said insulating cylinders, an insula,1,ing`ba,se secured to the bottom Wall of said casing, EL second insulating base secured within said casing in 2, plane above the longitudinal center line of said shaft, a plurality of stationary contact and terminal :members secured to each of said insulating bases, and means for effecting oscillatory movement of said shaft to bring said contactors into and out; cf bridging engagement with said stationary can-` tents. 7. In an electric switch, in combination, a. boxlike sheet metal casing having bottom, side and end walls and an **openable**-**cover**, a shaft having the major portion of the length thereof of square cross section, said -side Walls having alined **openings** to provide for endwise insertion of said shaft into said casing for bearing engagement with said **openings**, a tubular insulating member of square cross section slidable onto said shaft, 21, plurality of Hat punched sheet metal contactors slidable onto said insulating member and interlocked therewith for rotation thereby, a. plurality of molded insulating cylinders also interlncked with said insulating member and airangecl on opposite sides of and between said contactors to space the latter relatively to each other and to assist in insulating the same, each of said cuntactors having 2. pair of arms extending radially beyond said insulating cylinders, an insulating base secured to the bottom Wall of said casing, a, second insulating base secured within said casing in a. plane above the longitudinal center line of said shaft, a plurality of stationary Contact and terminal members secured to each of said insulating bases, and means for effecting oscillatory movement of said shaft to bring said contactors into and out of bridging engagement with said stationary contacts, each of said contact and terminal members being accessibly positioned within said casing to provide for removal and replacement thereof individually without disturbing any of the other parts of the switch. S, In an electric switch, in combination, 2. boxlike sheet `n1eta1 casing having bottom, side and end Wang and an **openable** **cover**, a. shaft having the major portion of the length thereof of square

cross section, said side Walls having alined **openings** to provide for endwise insertion of said shaft into said casing for bearing engagement with said **openings**, a tubular insulating member of square cross section slidable onto said shaft, a plurality of Bat-punched sheet metal contactors slidable onto said insulating member and interlocked therewith for rotation thereby, 2. plurality of molded insulating cylinders also interlncked with said insulating member and arranged on opposite sides of and between said contactors to space the latter relatively to each other and to assist in insulating the same, each of said contactors having s. plurality of arms extending ra.- dially from a, common center at an angle of substantially less than one hundred and eighty de¢ grees with respect to each other, an insulating base secured to the bottom Wall of said casing in a. plane offset laterally with respect to the center line of said shalt, a. second insulating base secured Within said casing in planes offset upwardly and laterally xvithrespect to said center. line, a, plurality of stationary contactand termina.l_members secured to each of sa.id_iusulating bases,_and means for eriecting oscillatory movement of said shaft to bring said contactors into and_ou1; of bridging engagement with said stationary con#- tacts. r _ » ' §;1n an enclosed electric switch, in combination, a, bux-like sheet metal casing having bottom, side and end walls and an **openable** **cover**, an insulating base secured to the bottom Wall of said casing, a. second insulating base secured within said casing independently of said first mentioned base and in spaced relation to said buttom well and said **cover**, a, plurality of bridging contactors each having a. pair of arms arranged at an angle to each other, an oscillatable shaft upon which said ccnwctors are supported within said casing in insulated relationship to each other and independently of each of said insulating bases, and each of said insulating bases having a, plurality of combined switch contact and wiring terminal elements associated therewith and located substantially in the planes thereof respectfively, said bridging contactors being movable jointly into and out of engagement with the contact portions of all of said elements respectively, said contact and terminal elements being readily accessible upon **opening** of said **cover** to permit removal .andreplacement of said elements without disturbing said contactors or any oi the other parts of the switch. 10. In an electric switch, in combination, a. bo;:~1ike sheet metal casing having bottom, side and end Walls and an **openable** **cover**, a, shaft having the major portion of the length thereof of square cross section, said side walls having aliued **openings** to provide for endwise insertion of said shaft into said casing for bearing engagement with said **openings**; 9, tubular insulating member of square cross section slidable onto said shaft, a plurality QI Hat punched sheet metal contactors slidable onto said insulating memberss and interlockecl therewith for rotation thereby, a. plurality cf molded insulating' cylinders also interlocked with said insulating member and arranged onvopposite sides of and between said contactors to space the latter rela-tively to each other 'and to assist in insulating the same, each of said contectors having za, plurality of arms extending ra.- dismlly from a. common center at an angle of substantially less than one hundred and eighty clegrees with respect to each other, an insulating base-secured to the bsttom Wall of said casing ins plane oiset laterally with respect to the center line of said shaft, a second' insulating base secured within said casing in planes offset upwardly and laterally with respect to said center line, 2, plurality of stationary contact and terminal membersvsecured to each of said in~ sulating, bases, means for effecting oscillatory moveinent of said shaft to bring said contactors into and out of bridging engagement with said stationary contacts, a plurality of fuse receptacles Ca1'1`lE!d 'oy said second mentioned insulating base, said **cover** having an **opening** adapted to register with saidiuse receptacles, a. sliding plate movable into and out of register with said **open**.- ing, and means providing a, releasable interlocking comaection between said shaft and said. sliding plate to normally insure against movement nf S0 the latter out of register with said **opening** pending movement of said contaotors out of bridging engagement with said stationary contacts. 11. In an electric switch, in combination, a. boxlike sheet metal casing having bottom, side and end walls and an **openable** **cover**, a shaft having the major portion of the length thereof of square cross section, said side walls having alined **openings** to provide for enclwise insertion of said shaft into said casing for bearing engagement with said **openings**, a tubular insulating member of square cross section slidable onto said shaft, a plurality of flat punched sheet metal contactors slidable onto said insulating member and interlocked therewith for rotation thereby, a plurality of molded insulating cylinders also interlockecl with said insulating member and arranged on opposite sides of and between said contactors to space the latter relatively to each other and to assist in insulating the same, each of said contactors having a plurality of arms extending radially from a common center at an angle oi substantially less than one hundred and eighty degrees with respect to each other, an insulating base secured to the bottom wall of said casing in a plane oife set laterally with respect to the center line of said shaft, a second insulating base secured within said casing in planes oifset upwardly and laterally with respect to said center line, a plurality of stationary contact and terminal meinbers secured to each of said insulating bases, means for, effecting oscillatory movement of said shaft to bring said oontactors into and out of bridging engagement with said stationary contacts, a plurality of fuse receptacles carried by said second mentioned insulating base, said **cover** having an **opening** adapted to register with said fuse receptacles, a sliding plate movable into and out of- register with said **opening**, and means providing a releasable interlocking connection between said shaft and said sliding plate to normally insure against rnovement of the latter out of register with said **opening** pending movement of said contactors out of bridging engagement with said stationary contacts, said sliding plate and said **cover** having cooperating parts to releasably latch the former in registering relation to said **cover** **opening** independently of the interlocking connection aforementioned. 12. In a fused safety switch, in combination, a relatively shallow **box**-like sheet metal casing having bottom, side and end walls and a hinged **cover**, an insulating base supported within said casing and spaced upwardly a, substantial distance from the bottom wall of the latter, a plurality of fuse receptacles carried by said base, said **cover** being Hat and having an **opening** to register with said fuse receptacles, a pair of metal strips secured at -opposite ends thereof to the inner surface of said **cover**, a plate slidable between the inner surface of said **cover** and said metal strips and guided by the latter for movement into and_out of registry with said **cover** **opening**, said plate having a pair of **openings** and said metal strips having bosses formed thereon and cooperable with said **openings** to releasably latch said plate in registry with said **opening** in the **cover**, wiring terminal elements associated with ,the opposite ends of the respective fuse receptacles and a pair of molded insulating members of substantially U-shape in horizontal cross section, said insulating members providing bailles between the fuse receptacles and said terminal elements and preventing access to the latter through said **cover** **opening**, a switch mechanism located within said casing, and means associated with said plate and adapted for interlocking engagement with said switch mechanism to normally prevent circuit closing operation of the latter pending movement of said plate into registry with said **cover** **opening**. 13, In a fused safety switch, in combination, a **box**-like sheet metal casing having a flat main **cover** member hinged thereto, said **cover** member having a substantially rectangular **opening** formed therein to provide access to fuses located within said casing, a pair of strip metal members hav;ng the end portions thereof oifset toward the under surface of said **cover** member and rigidly secured thereto in parallel relation to each other, a metal plate slidable between said strip metal members and the under surface of said **cover** member into and out of registry with said **opening**, said plate having iianges extending downwardly from opposite sides thereof and engageable with the outer edges of the respective strip metal members to be guided by the latter, said plate having a pair of relatively small **openings** formed therein, and said strip metal members having bosses formed thereon for cooperation with said **openings** to yieldably latch said plate in one of its extreme positions. 14. In a fused safety switch, in combination, a **box**-like sheet metal casing having a Hat main **cover** member hinged thereto, said **cover** member having a substantially rectangular **opening** formed therein to provide access to fuses located within said casing, a pair of strip metal members having the end portions thereof oifset toward the under surface of said **cover** member and rigidly secured thereto in parallel relation to each other, a metal plate slidable between said strip metal members and the under surface of said **cover** member into and out of registry with said **opening**, said plate having nanges extending downwardly from opposite sides thereof and engageable with the outer edges of the respective strip metal members to be guided by the latter, said plate having a pair of relatively small **openings** formed therein, said strip metal members having bosses formed thereon for cooperation with said **openings** to yieldably latch said plate in one of its extreme positions, and a switch mechanism located within said casing and operable from the exterior of the latter, said switch mechanism having a part thereof cooperable with one of the ianges on said plate to prevent engagement of the switch contacts pending movement of said plate into registry with said **cover** **opening**, said flange and said switch part also co-acting to prevent reverse movement oi said plate pending disengagement of said switch contacts. 15. As an article of manufacture, a flat punched sheet metal contactor for electric switches, said contactor having a body portion of substantially circular contour, a pair of arms extending radially from said body portion, the radial center lines of said arms being spaced from each other by an arc of approximately one hundred and thirtyseven degrees, said body portion having a relatively large substantially square **opening** formed centrally therein, for cooperation with an oscillatable supporting element oi square cross section and one pair of the walls of said **opening** being arranged in planes parallel to the radial center line of one of said arms. 16. As an article of manufacture, a Hat punched sheet metal contactor for electric switches, said contactor having a body portion of substantially circular contour, a pair of arms extending radially GG (Ed TU T5 from said body portion, the radial center lines of said arms being spaced from each other by an arc of approximately one hundred and thirtyseven degrees, said body portion having a. relatively large substantially square **opening** formed centrally therein, one pair of the walls of said **opening** being arranged in planes parallel to the radial center line oi one of said arms, and the non-adja_- cont edges of the respective arms being chamfcred to faciliate entry thereof into cooperative engagement with resilient stationary contacts of suitable form. 17. As an article of manufacture, a fuse battle wail comprising a molded insulating member of substantially U-shape in horizontal cross section, said member being adapted to partially surround a plurality of receptacles for fuses of the cartridge type, said member having channels in the bottom surface thereof to provide clearance for wiring terminal bus members of suitable form, and lugs formed integrally with said member at opposite ends thereof, said lugs being formed to provide for releasable attachment thereof to a suitable support. 18. In a device of the character described, in combination, an insulating base, a plurality of longitudinally alined pairs of clips for fuses of the

cartridge type secured to said base, wiring terminal bus members secured to the respective clips and projecting longitudinally therefrom, a pair ol' molded insulating members of like form, each of said insulating members being of substantially U-shape in horizontal cross section, said insulating members being secured to said base with the **open** ends thereof opposed to but substantially spaced from each other to facilitate removal of fuses from the respective pairs oi' clips, said insulating members having the end wall portions thereof interposed between said clips and their respective wiring terminals, and said insulating members having channels in the bottom surfaces thereof respectively to accommodate the bus portions of said terminals

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Probable Assignee:	US ORDNANCE ENGINEERS INC
Assignee(s):(std):	US ORDNANCE ENGINEERS INC
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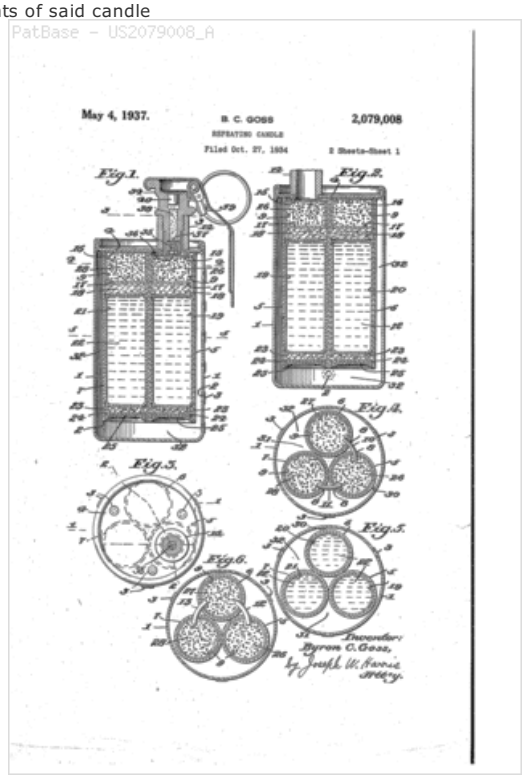
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Abstract:
Source: US2079008A I claim- 1. A multiple flight gas candle comprising associated means to generate in said candle spaced successive charges of high pressure gas, vents in said candle, said successive gas charges blasting through said vents as high pressure gas blasts, each successive gas blast impartii-lg a successive Bight to said candle. 2. A multiple Eight gas candle comprising a casing, areas constituting vents in the wall thereof, a plurality of elements therein, each of said elements containing explosive and gas generating chemicals, means to explode said explosive in the separate elements in spaced succession, each spaced explosion generating and violently expelling spaced discharges of gas from said candle through said vents, each discharge of gas impaiiing to said candle an additional flight, 3. A multiple Bight gas candle comprising a casing, areas constituting vents in the wall thereof, a plurality of elements in said casing, each of said elements containing an explosive and gas generating chemicals, time fuzes having different time periods associated with said elements, means to ignite one of said time l'uzcs_ said time fuzes arranged to explode the explosives in said elements in spaced succession, each explosion generating in and violently discharging from said candle and through said vents a blast of gas, and each successive blast of gas imparting an additional iight to said candle. 4. A jumping candle comprising a closed casing, destructible areas constituting vents in the Wall thereof, a gas chemical element therein containing an explosive, said element so shaped and located as to provide an expansion chamber within said casing. said element constructed to discharge when exploded a blast of gas into said chamber, said blast of gas destroying said destnlctible areas and discharging from said vents as violent blasts of gas, said violent blasts of gas reacting on external media and "jumping" said candle, and means to Hre said explosive, 5. A jumping candle or grenade, comprising a casing having a passage therethrough and **openable** areas constituting vents when **opened**, a plurality of associated charges of explosives and gas generating chemicals in said casing, means to explode said explosives at spaced intervals, said explosives and gas chemicals upon explosion generating high pressure gas, said high pressure gas blasting thru-ugh said passage in a substantially reverse direction and through said **openable** vents as successive high velocity blasts of gas, said blast, of gas projecting said candle in successive jumps. 6. A jumping. repeating, gas dischargin candle, comprising 9. **container**, a plurality of elements in said candle each containing a gas charge and an explosive, said elements being sol shaped and located as to provide an expansion chamber and gas passages, each of said elements positioned to separately and successively discharge a blast of gas within the **container** and towards said chamber when exploded, said passages leading from said chamber through which said successive blasts of gas travel in a substantially reverse direction through said **container** before discharging therefrom, areas in the wall of said **container** through which said blasts of gas discharge, and means to fire said elements at spaced intervals. 7, A jumping, repeating, gas discharging candle, comprising a **container**, a plurality of elements in said candle each containing a gas charge and an explosive, said elements being so shaped and located as to provide an expansion chamber and gas passages, each of said elements positioned to separately and successively discharge a blast of gas within the **container** and towards said chamber when exploded, said passages leading from said chamber and through which said successive blasts of gas travel in a substantially reverse direction through said **container** before discharging thexefrom, areas in the wall of said **container** through which said blasts of gas discharge, said successive blasts of gas upon leaving said **container** reacting against external media and mechanically jumping said candle, and means to tire .said elements at spaced intervals. 8. A jumping gas discharging candle or grenade containing a plurality of shielded explosive and gas charges constructed to explode at timed intervals and produce automatic successive jumps and to deliver successive discharges of gas, said gas discharges timed with the jumps, said candle or grenade comprising a casing, restricted vent areas therein, elements containing explosives and associated gas generating chemicals in said casing, said elements being so shaped and located as to provide an expansion chamber and gas passages within said casing, and Iiring means timed to separately explode said explosives and generate said gas at successive periods and violently discharge blasts of generated gas into said chamber and thereafter through said passages in a substantially reverse dlrection' and through said vents at spaced intervals, said successive explosions and violent discharges eifecting said successive jumps, 9, A jumping candle or grenade constructed to deliver repeated time-delay discharges of gas. comprising a casing, a plurality of gas charges each associated with cooperating explosives in said. casing. means to explode said associated ex-plosives and gas charges at spaced time-intervals, said candle constructed with restricted **openable** areas adapted to function as gas vents when **opened**, a iirst of said explosives timed to explode upon approximate landing after having been thrown, said first gas charge upon being exploded generatiug gas under high pressure, said high pressure gas bursting **open** said **openable** areas and discharging therethrough as gas blasts at high velocity, said high velocity blasts of gas reacting against external media to propel said candle as a "jump" from the nrst landing -to a different location, the time of landing at said different location corresponding approximately to the time of a second explosion-, high velocity blasts of gas being blasted from said candle at said second explosion approximately at the time of the second landing and propelling said candle as a. second ";iu.mp" to a third location, and said candle repeatedly exploding and repeatedly projecting high velocity blasts of gas and repeatedly "Jumping" after each explosion until said candle is exhausted. 10, A gas candle or grenade, comprising a casing provided with restricted **openable** gas discharge areas, a self-contained explosively actuated gas generating chemical element within said casing, the space between said element and casing constituting a gas pressure chamber, means for eiiecting the explosion of said element to deliver gas therefrom into said pressure chamber and from said chamber through said gas discharge areas as a high] {.)1'€SS'l.l1`E blast of gas, whereby said gas blast upon impinging upon an external medium Will react thereupon and .cause bodily movement -of said candle. 11. A gas candle -or grenade, comprising a -casing, a plurality of explosive containing gas generating elements in said casing, said elements so shaped and located in said casing as to provide a pressure chamber and a gas passage therein, means for causing said elements to successively explode and generate gas under high pressure in said chamber, said casing having restricted **openable** sas discharge areas for discharging gas when said areas are **opened**, said gas discharging 'through said **opened** areas against external media, said discharging gas adapted to react against said external media and to cause successive bodily movements of said candle. 12. A gas candle or grenade comprising a casing having an end wall, an explosive-containing gas-generating element in said casing spaced from said -end wall, said element being so shaped and located as to provide a pressure chamber and gas passages within said casing, means for initiating the discharge of said explosive and the generation of saidgas, said -discharge oi' gas violently blasting into said chamber and therefrom through said passages in a reverse direction, restricted gas delivery areas in said casing remote T-rom said pressure chamber for delivering said violent blast oi gas therethrough against an external medium and thereby 'causing bodily movement of said candle. I 13. A gas candle or grenade comprising a -casi-ng, elements containing -gas generating chemicals, said elements being so shaped and located as to provide a pressure 'chamber and gas passages within -said casing, said elements also containing explosives for

volatilizing said chemicals and successively generating gas ‘pressures in said chamber upon explosion, means to successively fire said explosives, said casing having restricted opcnable -gas discharging areas for discharging blasts of generated gas from said chamber through said passages in a substantially reverse direction to and through said areas and against external media, said blasts of gas adapted to react against said media to cause successive bodily movements of said candle. 14. A gas discharging candle or grenade comprising a casing having opposite end portions, an explosive-containing gas-generating element for explosively generating gas in said casing, said element spaced from one of said end portions, the resulting space constituting a pressure chamber between said element and said latter end portion, means for initiating the discharge of the explosive and the generation and delivery of gas from said element in a direction toward said pressure chamber, restricted cpenable gas de. ilvery areas in said casing for discharging a violent blast of gas from said casing at high velocity against an external medium, said blast of gas adapted to react against said medium and to cause translatory movement of said candle. 15. A gas candle or grenade comprising a casing provided with a non-destructihle portion, a. gas element in said casing, said element so shaped and located in said casing as to provide an expansion chamber and gas passages within said casing, said element .containing an explosive and gas generating chemicals, means for .exploding said explosive and thereby generating gas from said chemicals, the discharge of said gas being initially directed into said chamber and against said non-destructible portion of said casing, and thereafter through said passages in a substantially reverse direction, the said casing having restricted **openable** gas exit areas for discharging the generated gas from said casing, said .gas blasting through said areas with sufficient velocity against an external medium to cause translatory movement of said candle or grenade. 18. A gas candle or grenade comprising a casing having a non-destruetlble portion, gas generating elements containing explosives in said casing, said elements spaced from said non-destructible portion and thereby providing an expansion chamber Within said casing and said elements located to discharge gas into said chamber upon explosion, .said ,casing having restricted **openable** gas 'discharge areas remote from' said expansion chamber, saiddischarge .areas adapted when **opened** to discharge gas against external media, said discharging gas adapted to react against Said media to cause bodily movements of said candle, and said elements so disposed in said casing ,as to ‘provide pasages connecting said discharge areas with said expansion chaniber. and means for causing said elements to successively explode and discharge gas into said expan- :sion chamber. 17. A repeating gas candle or grenade containing separate explosively shielded charges _of cooperating explosive and gas chemicals, and constructed and arranged to be iired and successively explode and to automatically discharge repeated hlasts of disabling and irritating gases of the “tear” gas type at successive intervals, said repeated successive blasts of gas reacting against external media and mechanically jumping said candle to diderent spots and delivering individual blasts .between the jumps after being thrown. l8. A repeating gas candle comprising a plurality of chemical-gas charges, said gas charges -capable of developing disabling and irritating gases of the “tear” gas type, a sepamte €XP10SiV€ charge in operative relation to .each of Said gas 6 2,079,003 _ charges, and a plurality of time-delay fuzes having different time~delay periods, a separate fuze associated with each explosive charge, said candle constructed and arranged to be fired and to deliver high pressure blasts of gas at spaced intervals, each blast of gas reacting against external media and mechanically propelling said candle through the air in successive jumps between the blasts. 19, A repeating gas-discharging non-bursting candle, comprising a. casing, at least one **opening** therein, a destructible **seal** over said **opening** or **openings**, a plurality of gas-chemical holding ele~ ments located in said casing, each of said elements containing its own charge of explosive and a charge of gas-generating chemicals in proximity thereto, time-delay fuzes associated with said explosives, each charge of explosive being arranged to be separately and successively iired by said time-delay fuzes and to volatilize said gas-gem erating chemicals and discharge the generated gases through said **opening** or **openings** as separate successive gas blasts, said separate successive blasts reacting against external media and mechanically propelling said candle through the air in successive jumps between the blasts, ~ 20. A repeating candle comprising a casing, at least one **opening** therein, a destructible **seal** or **seals** over sa-id **opening** or **openings**, a plurality of gas-chemical holding elements located in said casing, each of said elements containing its own charge of explosive and a charge of gas generating chemicals in operative relation thereto, timedelay fuzes associated with said explosives, at least one of said time-relay fuzes arranged to be initially ignited, each charge of explosive arranged to be separately and successively nred by said ignited time-delay fuzes and to volatilize said gas-generating chemicals and discharge the generated gases as separate gas blasts at timed intervals, said blasts of gas reacting against external rnedia. and propelling said candle through the air in successive jumps, with the blasts of gas timed to occur at about the time of the jump. 21. A repeating gas discharging candle comprising a easing, at least one **opening** therein, a destructible **seal** or **seals** over said **opening** or **openings**, a. plurality of gas-chemical holding elements located in said casing, each of said elements contalnlng its own charge of explosive and a. charge of sas-generating chemicals in operative_relation thereto, each charge of said explosive being suicient in quantity tor volatilize said gas-chemicals in its respective element, the explosive charge in a first element arranged to be initially fired, 9. plurality of time-delay fuzes arranged to be ignited and explode the explosives and volatilize the gas-chemicals in successive elements at successive predetermined intervals after the ignition of the explosive in said first element, said elements being so located in said casing as to provide an expansion chamber to receive the charges of high pressure gases generated by the successive explosions and to discharge said high pressure gases as timed, separate, successive gas blasts through said **opening** or **openings**, said separate successive gas blasts propelling said candle through the air in successive jurnps, and means to attach a fuze-head to said candle to initially fire one of said fuzes at a predetermined time. 22. A repeating gas-discharging candle comprising a, casing, at least one **opening** therein, a destructible **seal** or **seals** **covering** said **opening** or **openings**, a plurality of gas-chemical holding elements located in said casing, each of said elements containing its own charge of explosive and a charge of gas-generating chemicals in operative relation thereto, each charge of explosive being suiicient in quantity to volatilize said gas-chemicals in its respective element, a plurality of timedelay fuzes arranged to be ignited and explode the explosives and volatilize the gas-chemicals in successive elements at successive predetermined intervals and to discharge blasts of high pressure gases as timed, separate, successive gas blasts, the separate successive gas blasts reacting against external media and propelling said candle through the air in successive jumps, with the blasts- of gas timed to occur at about the time of the jump, and means to attach s, firing device to said candle. 23. A repeating gas-discharging candle comprising a casing, **openings** therein, destructible **seals** over said **openings**, a plurality oi gas-chemical holding elements located in said casing, each of said elements containing its own charge of explosive and a charge of gas-generating chemicals in operative relation thereto, each charge of explosive being suftloicnt in quantity to volatilize said gas-chemicals in its respective element, the explosive charge in a iirst element arranged to be initially fired, a. plurality of time-delay fuzes. said fuzes arranged to be fired and to explode the explosives and volatilize the gas-chemicals in successive elements at successive predetermined intervals, said elements being so shaped and located as to provide an expansion chamber in said casing, said chamber arranged to receive the charges of high pressure gases generated by the successive explosions and to discharge said high pressure gases as timed, separate gas blasts, said separate gas blasts propelling said candle through the air in successive jumps, and means to secure a firing device to said candle to initially ire at least one of said fuzes. _ 24. A repeating candle comprising a casing, perforations therein, destructible **seals** over said perforations, a plurality of gas-chemical holding elements located in said casing, each of said elements containing its own charge of explosive and a charge of gas-generating chemicals in operative relation thereto, each of said explosives loeing sufficient in quantity to volatilize said gaschemicals in its respective element, a plurality of time-delay fuzes arranged to be ignited and explode the explosives and volatilize the gas-ohemicals in successive elements at successive predetermined intervals, said elements being so shaped and located as to provide an expansion chamber in said. casing to receive the charges of volatilized chemicals as charges of high pressure gases and to deliver said charges of high pressure gases as timed, separate gas blasts through said perforations, an igniting means to ignite said fuzes when said candle is thrown, the first explosion arranged to occur during the initial flight of the candle and to discharge a violent blast of gas, said Violent blast of gas and said timed separate gas blasts propelling said candle through the air in successive jumps. 25. A repeating candle comprising a casing, perforations therein, destructible **seals** over said perforations, a plurality of gas-chemical holding elements located in said casing, each of said elements containing its own charge of explosive and a charge of gas-generating chemicals in operative relation thereto, each charge of said explosive being suiiicient in quantity to volatilize said gas-chemicals in its respective element, a plurality of time-delay fuzes, said fuzes having diiierent time-periods, the said separate fuzes arranged to lire separate charges of explosives, at least one of said fuzes arranged to be nred when the candle is mst thrown, said fuzes arranged'to ignite the separate charges of explosives at predetermined intervals, a first charge of explosive arranged to be iired during the initial rlight of the candle and to discharge a irst blast of gas during said initial flight, successive charges of explosives arranged to be automatically fired thereafter and to deliver successive spaced blasts of gas, each blast of gas reacting agaunst external media and propelling said cand’e through the air in successive jumps. 26. A repeating gas candle or grenade comprising a casing, said casing provided with restricted **openable** areas adapted to be **opened** by an explosion within said casing, a plurality of separately and successively explodable gas elements Within said casing, each gas element containing associated explosive and gas-generating chemicals in effective quantities, said gas elements positioned`from a portion of the interior of said casing thereby providing a chamber constituting a gas pressure chamber, means to separately and successively explode each gas element, each exploded gas element generating a, separate charge of high pressure gas, said **openable** areas **opened** by a first explosion of the explosive in one of said gas elements and the generated high pressure gas expanding and violently blasting through said **opened** **openings** as high velocity gas streams, each successive charge of said high pressure gas violently blasting through said **openings** upon the successive explosions of said gas elements, said high velocity gas streams adapted to react against external

media in a manner to produce successive translatory movements of said candle. 27. A repeating gas candle or grenade comprising a casing, a restricted **openable** areas in said casing adapted when **opened** to provide vents, a plurality of gas-generating elements in said casing, said elements positioned to provide a ~v gas pressure chamber between said elements and the interior of said casing, each of said elements containing a charge of explosive and a charge of gas-chemicals in operative relation thereto, a plurality of time iuzes arranged to be ignited and explode the explosives and volatilize the gas chemicals in successive elements at successive intervals, the separate and successive volumes of volatilized gas-chemicals and the explosive material gases accumulating in said gas pressure chamber as volumes of intensely high pressure gas, said high pressure gas bursting through said **openable** areas and discharging as violent blasts of high pressure gas streams, said gas streams reacting against external media in a manner to produce successive translatory movements of said candle. 28. A repeating gas candle or grenade cornprising a casing, said casing provided with restricted cpenable areas adapted to be **opened** by an explosion Within said casing, a plurality of gas elements in said casing and positioned to provide a gas pressure chamber between said elements and the interior of said casing, each of said elements containing effective charges of explosives and or gas-chemicals in operative relation to each other, means to separately and successively explode each explosive charge and thereby separately and successively volatilize each charge of gas-chemicals in said gas elements, said **openable** areas **opened** by a first explosion of one of said elements and thereby providing vents for the gas generated by the volatilized gas-chernicab, said generated gas being under high pressure and violently blasting through said **opened** areas and issuing as high velocity gas streams, the gases from each remaining separately exploded gas element consisting of high pressure gas charges and expanding and blasting through said **opened** areas as successive spaced Violent high velocity blasts of gas streams, said gas streams reacting against external media in a manner to produce successive translator-y movements of said candle



7) Family number: 21520865 (US2114623A)

Title:	METHOD OF PROVIDING FOR INTERNAL ATMOSPHERIC EXPANSION OF FILLED **BAGS** AND HERMETICALLY **SEALING** SAME
Priority:	US19370129010 19370304

Family:

Publication number	Publication date	Application number	Application date
US2114623 A	19380419	US19370129010	19370304

Probable Assignee:	EDNA MAY BERGSTEIN
Assignee(s):(std):	EDNA MAY BERGSTEIN ; ROBERT MORRIS BERGSTEIN
Inventor(s):(std):	MORRIS BERGSTEIN ROBERT
Inventor(s):	BERGSTEIN ROBERT MORRIS
International class (IPC 8-9):	B65B7/18 (Advanced/Invention); B65B7/16 (Core/Invention)
International class (IPC 1-7):	B65B7/18 B65D5/60
CPC:	B65B7/18
European class:	B65B7/18
US class:	206/527 229/117.27 383/94 53/449 53/477

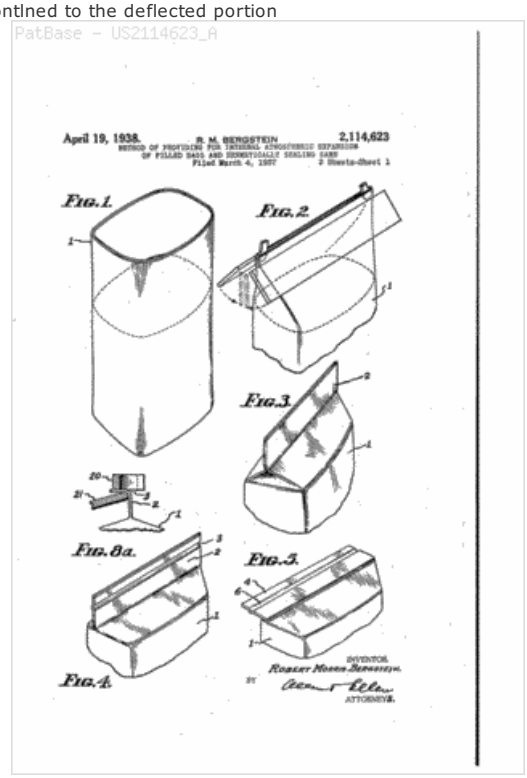
Classification Explorer

Forward Citations:	WO0200508, US6386438, US4505385, US3162302, US3128934, US2975955, US2835380, US2771333, US2653752, DE3113600,

Abstract:

Source: US2114623A Having thus described my invention, whlch I claim as new and desire to secure by Letters Patent, ls:- 1. A method of .**sealing** **bags** whereby space is provided for internal expansion after find] **sealing** which consists in collapsing the **bag** mouth and applying heat thereto in a zone located above the initial contact of the mouth walls a distance sufllcient to accommodate Buld expansion within the **bag**. 2. A method of **sealing** **bags** whereby space is provided for internal expansion after dual **sealing** which consists in collapsing the **bag** mouth and applying heat thereto in a zone located shove the initial contact of the mouth walls, said zone being established by curving the **bag** mouth without substantial pressure during heat application. 3. A method of making air- and liquld-tight **closure** seams on the **open** end ol al nlled **bag** which consists ot reducing the atmospheric volume within the interior by flattening together the opposite walls above the contents thereof, causing a curving of said Battened walls on at least one straight Une, said line located above the apexes of the triangles formed due to the flattening of said walls, and while in curved position causing heat to beapplled to the curved zone to result in a. face to face fusion of the inner surfaces ot walls substantially denned by said curvature, the spacing of said fused llne being sumclently spaced above said apexes to accommodate Huld expansion within the **bag**. ' 4. A method of providing space for atmospheric expanslon_wlthln_ the interior of an hermetically **sealed** **bag** which consists of ilattening the walls of said **open** mouth of bas' after same has been nlled with contents, thus causing a lessening of atmospheric volume within the lnterior of sald **bag**, and when In Battened position **sealing** the upper portion only of said flattened walls. _ 5. A method of making a. liquid-tight and alrtlsht **seal** ln‘a iilled ba: having a heat fuslble interior surface, consisting of nattenlnz the **open** mouth causing the opposite walls to be brought face to face, causint a line of curvature across a predetermined portion oi the flattened area above the peak of the triangles formed incidental to said Ilattenlnz, and while ln curved position to cause a fusion of the inner surfaces at said line of curvature by means of heat, said fused line being sumciently spaced above said apexes to accommodate the subsequent internal expansion within the **bag**. 6. A method of making a liquid-tight and sirtight **seal** in a. nlled had havin! ll- hut fusible interior surface, consisting of 11att.enlng_the **open** mouth causing the opposite walls to he brought hoe to num without reentrant folds, causing a llne of curvature across ,a predetermined nos'- tlon ot the flattened area above the peak of the 4 = an triangles formed incidental to said Battenlng, and while in curved position tocause a fusion ot the inner surfa.ces'at said line of curvature by means of heat, said fused line being sumclently spaced above said apexesto accommodate the subsequent lntemal expansion within the **bag**. ' 7. A method of **sealing** the **open** mouth of a material containing **bag** consisting of bringing together in Battened relationship the two opposite 0 walls of said mouth, and thereafter **uniting** the interior surfaces of said two opposite walls by means of heat over a predetermined llmlted portion. of said Battened areespaced away from the Initial line of contact of the walls so as to ro I, _ vide a substantial expansion zone in the **bag** above the material therein. 8. A method of closing the mouth of a **bag** made of substantially impervious material having contents thereln. which consists of bringing together 0 in flattened position two opposite walls of said mouth and while in Battened position elfecting an air-tight **seal** above the base of the Battened portion, sufdclently to permit the subsequent expanslon within the **sealed** **bag**. 9. A method of closing the mouth of a has made of substantially _impervious material having contents therein, which consists of brlnslns together in Battened position two opposite walls of said mouth with no reentrant folds intervening ‘ and while in Battened position effecting an alrtight **seal** above the base of the Battened portion, sufbclently to permit the subsequent expansion within the **sealed** **bag**. 10. 'A method of **sealing** an extending mouth ol' a' **bag** made of substantially impervious material heat scalable on the interior at least which consists of effecting a Battened relationship between , two opposite sides of said mouth with no additional thlcknessof material intervening, and while maintaining said Battened relationshlp bringing about a. **seal** between said sides by heat, said **seal** being positioned suillclently above the base of the Battened area to permit thesubsequent atmospheric expansion withln the heat **sealed** **bag**. ll. A method of **sealing** an extending mouth of a. **bag** made of substantially impervious material heat **sealable** on the interior atleast which consists ol' effecting a Battened relationship between two opposite sides of said mouth with no additional thickness of material intervening, and whlle maintaining said Battened relationship bringing about a **seal** between said sides by heat, said **seal** being positioned sumciently above the base of the Battened area to permit the subsequent atmospheric expansion withln the heat **sealed** **bag**, and said **seal** being made by bringing a. portion of the Battened area., extending entirely across the Battened area but at a. distance above the base of sald area, Into curved relationship on a straight 1lne,,to assure positive contact incident to sald curving, and applying heat to said portion while In curved relationship to elfect s fused hermetic-a.l **seal**. 12. A method of closing the mouth of a **bag** ' made of substantially impervious material havlng contents therein, which consists of bringing together ln Battened position two opposite walls of sold mouth and while in Battened position effecting an air-tight **seal** at e distance above the base of the Battened portion, sumdently to permit the subsequent expans1on_wlthin the **sealed** **bag** and thereafter folding said Battened portion while retaining in Battened position and edectlns an hennetlcal sea.l.` ~ 13. A method of closing the mouthvof at **bag** 14,623 _ made of substantially impervious material having contents therein, which consists of bringing together in Battened relation two opposite walls of said mouth and while in Battened rela.tlon._ elfecting an air-tight **seal** above the base of the Battened portion, to permit expansion within the **sealed** **bag** and thereafter folding said Battened portion while retaining in Battened position effecting an hermetlcal **seal**, said **seal** being made by bringing a zone above the base of the Battened portion into arched condition and applying heat to the said area substantially defined by the arc. 14. A method of **sealing** hermetically the **open** mouth of a **bag** made of relatively impervious material, heat **sealable** on the interior at least, and with seams integrally **united**, whereby opposite walls of mouth are flattened with no folds intervening between said walls, and applying heat sumciently above the juncture of said walls to fuse interior integrally, to thus provide space for the subsequent atmospheric expansion internally by means of the dlstendlng of the Battened area below the line defined by the **seal**. 15. A method of **sealing** the **open** mouth of a liner made of substantially impervlousmaterlal, heat **sealable** on the interior at least and projecting from an end of a carton enclosing body p0r¢ tion of said liner, said carton having closing Baps attached to said end, which consists of bringing opposite liner walls together in fully Battened condition, and also to cause a partial Battenlng of said walls on the interior of main body of said carton, and while retaining the liner mouth in said condition eiecting a face to face herrgetical **seal** between said Battened walls above the apexes of triangular portions of liner formed incident to said Battening, whereby internal atmosphere within **sealed** liner is sumelently reduced to permit,the **sealed** mouth to be readily foldable into the body of carton, whereby after the closing Baps of carton are secured the internal atmosphere can expand the partially Battened liner walls to the extent permitted by the expansion ot the fully Battened portion below line of **sealing**. 16. A method ,of **sealing** the **open** mouth of a liner made oi' substantially impervious material Joined hermetically at all seams, the body of said liner being enclosed within a carton having closlng Bupa adjacent to **open** end thereof, said **open** mouth projecting from said

open end of carton, conslstlngof bringing opposite side mouth walls into Battened contact causing a graduated taper of said walls from their lower line of contact to a. point below the top edges of the carton, and while in said position eB'ecting an hermetic closure between walls along a. line a substantial distance above said lower line of contact, whereby the free Battened mouth walls may subsequently expand into the space provlded by said taper within the carton. 17. A method of sealing the extending open mouth of a liner the main portion of which is mxelosed in an outer carton, said carton having closing Baps attached to edges of the open end adjacent to the open mouth of the liner, which consists of causing the complete Battening together ot the opposite walls of liner mouth, and partial Battenlng ot said walls within the main. body of carton, thereafter etfectinl an hermetlc seal a. distance sumciently above the base of the completely Battened area that the expsnsible area within the sealed liner can expand to the extent that the cubic content of the main body of the carton will permit. _ 18. A method ol Sealing the open mouth of a ao as no as llnerwholebodylsenelosedinanoutercarton which consists ln' reducing the atmospheric volume of the liner prior to the sealing and thereupon seallng said liner so that the surface area of the liner below the line of sealing is substantially ,equal at least to the lntemal area of the carton body, and potential volumetric content within said sealed liner substantially equal to the cubic volume 'of the carton body, to provide space for expanslon of the flattened evacuated bag area below llnerseal to the limit permitted by sald enclosing carton. ' 19. A method of sealing the open tcp of a contents containing liner whose body is enclosed within a carton having naps appended to its open end, and which consists In 'securing said liner body to the maln carton body a sumclent distance below the upper edge of the main carton body to allow for bag expansion, then drawing together opposite walls of said open top ol llner so that said walls extend in a graduated taper to the joint securing the maln body of the liner to the main body o! the carton. and then sealing the said 'walls to each other with avsubstantlal flattened portion below the seal. ` 20. A method of sealing a package comprising an cuter carton having closing flaps adjacent 'to open end and enclosed within the body of carton a liner having its open mouth extending beyond mnln body of carton intermediate sald closing naps which consists of folding said closing flaps outwardly, elongating the top of the liner and sweeping said elongated walls together in daigsed posltlon, causing a partlal contraction of walls within' the main bod! Of the carton, thereafter bringing a section c! the flattened walls above the apexes of the triangular portions formed incidental to said nattenlng, into curved position In a substantlallystraight line extending » completely across the flattened portlon and applying heat to said curved section while so curved thereafter folding sealed liner top substantially into plane deflned by upper edges of main body of carton, folding said carton closing and naps inwardly to overlie said sealed liner top and thereafter securing said carton closing naps together. - ` 2114 method of sealing apackage comprising an outer carton having closing llaps adiacent to open end and enclosed within the body of carton a liner having its open mouth extending beyond main body of carton intermediate said closing flaps which consists of folding said closing flaps outwardly, elongatlng 'the top of the liner and sweeping said elongated walls together ln flattened position, causing a partial contraction of .said walls within _the main body of the carton, thereafter brlnglng a section of the ssBattened walls above the apexes o! the triangular portions Iormed incidental to said llattenlrsg, into curved position In a substantially stralghtltne extending 'completely across the flattened area and applying heat to said curved section whlle so curved thereafter folding inwardly one set of opposite closing naps of said carton, and then folding lnwardly the opposite pair of closing tlaps and then securing said flaps together. , ' 22. A_method of sealing the open muuth.of a filled bag which consists of bringing together in flattened posltlon two opposite walls of the bag mouth, and applying heat ln two successive steps to a predetermined portion of said flattened area. 23. The method of forming a. closing seam in the open mouth of a nlled bag, the interior of sald mouth at least being heat fuslble which consists ln nattenlng together Qliposite walls of said bag, detecting a portion of said walls, and while so detected applying heat substantially contlned to the deflected portion



8) Family number: 20957640 (US2172930A)

Title:	**DISPENSING CONTAINER**
Priority:	US19340758820 19341222

Family:

Publication number	Publication date	Application number	Application date
US2172930 A	19390912	US19340758820	19341222

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Assignee(s):(std):	ALBERT BORDEN
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Inventor(s):	BENSEL DURYEA
International class (IPC 8-9):	B65D30/24 B65D5/06 (Advanced/Invention); B65D30/24 B65D5/02 (Core/Invention)
International class (IPC 1-7):	B65D31/14 B65D33/30
CPC:	B65D5/062
European class:	B65D5/06B1
US class:	229/137 229/214 229/239 383/81

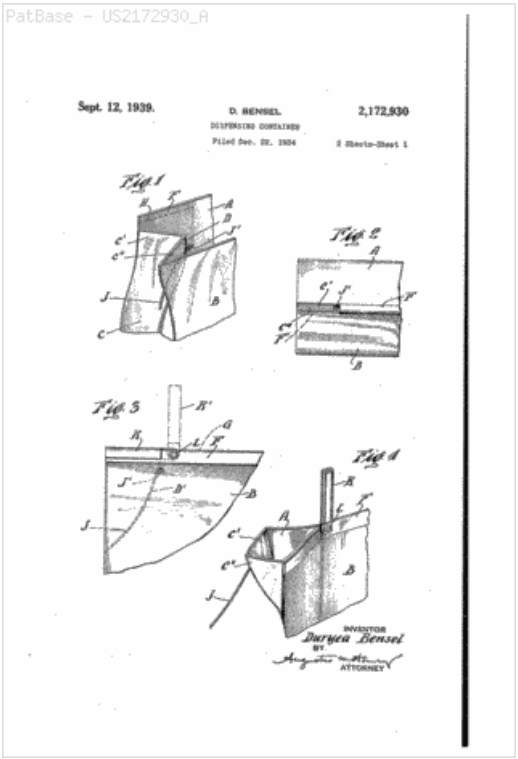
Classification Explorer

Forward Citations: WO9425352, WO9425352, US6439453, US5716473, US5437406, US4567987, US4557385, US4266692, US4209096, US3361333, US3217967, US3178089, US2987234, US2016088983,

Abstract:

Source: US2172930A Having thus described the invention what is claimed is: 1. A packaging and dispensing container having a corner portion formed by opposite walls united to form a seal a portion of which comprises a temporary seal, and an end or third wall forming a Hurting extending inwardly beneath said temporary seal and uniting said opposite walls, and means supported by said container for folding said Huting outwardly when said temporary seal is broken to form a pouring spout substantially as described. 2. A packaging and dispensing container having a portion thereof formed by opposite walls united to form a main seal, said seal having a temporary severable portion and a permanent portion in combination with a movable closure or auxiliary seal coextensive with said temporary seal portion, said closure having a permanent connection with said main seal, said connection defining the terminals of said permanent and temporary seal portions whereby said main seal is reinforced and said temporary seal portion is closable by said closure or auxiliary seal, substantially as described. 3. A packaging and dispensing container having opposite walls united to form a main seal for said container, said seal including a temporary seal portion and a permanent seal portion, and a movable closure or auxiliary seal for said temporary seal portion permanently secured by a pivoted connection to said main seal, said connection deiining the union of said temporary and permanent seal portions, whereby said main seal is reinforced and a closure or auxiliary seal is provided for said temporary seal portion. 4. A packaging and dispensing container as specified in claim 3, wherein the movable closure or auxiliary seal is subtantially U-shaped in cross-section whereby the legs of the U are adapted to receive and embrace the temporary seal portion. 5. A packaging and dispensing container as defined in claim 3, in which the pivotal connection extends through said walls and forms a stop or means coniining the breaking of» the seal to the temporary seal portion. 6. The packaging and dispensing container described in claim 1, in which the two firstmentioned walls are united also beyond the temporary seal to form a permanent seal in line with the temporary seal beyond the nuting when inwardly folded, and a movable closure or auxiliary seal movably mounted on the package for movement relative to the two first-mentioned seals to reinforce the permanent seal and to reclose the temporary seal after the same is severed; substantially as described. 7. A pouring container comprising opposite' side walls; an intermediate wall connecting the side walls and inwardly turned between said cpposite walls to form a recess extending to the exterior of the container; a closure flap of severable material extending from end to end of, and attached to one of said opposite walls and passed over the free edges of the intermediate wall and secured to the other opposite side wall and adapted tofbe easily severed at the portion over the recess, whereupon the inwardly turned intermediate wall may be pulled outwardly to form G0 D5 T0 a pouring spout; and stop means secured over said flap and adapted to limit said severing. 8. A pouring container comprising opposite side walls; an intermediate wall connecting the side walls and inwardly turned between said opposite walls to form a recess extending to the exterior of the container; a closure flap of severable material extending from end to end of, and attached to one of said opposite walls and passed over the free edges of the intermediate wall and secured to the other opposite side wall and adapted to be easily severed at the portion over the recess, whereupon the inwardly turned intermediate wall may be pulled outwardly to form a pouring spout; and a spring clip of U-shaped cross-section clamped over said flap at said portion. 9. A pouring container comprising opposite side walls; an intermediate wall connecting the side walls and inwardly turned between said opposite walls to form a recess extending to the exterior of the container; a closure flap oi' severable material extending from end to end of, and attached to one of said opposite walls and passed over the free edges of the intermediate wall and secured to the other opposite side wall and adapted to be easily severed at the portion over the recess, whereupon the inwardly turned intermediate wall may be pulled outwardly to form a pouring spout; and a spring clip of U-shaped cross-section ~clampecl over said flap at said portion and Dlvotally connected at its inner end to the container and in part removable from said portion and forming stop means secured over said flap and adapted to limit said severing. 10. A carton comprising a blank of bendable sheet material including opposed side walls having a closure extending along the tops thereof, pivot means nxed in the closure, said closure having a permanent part on one side of the pivot means, an openable part onthe opposite side of said means, and a clip of U-shaped cross-section plvotally mounted on said means and having its legs embracing opposite sides of said openable part. ll, A paperboard container comprising two end body walls each having plural inwardly folded top portions cooperating to provide a closure, two portions of each wall having adjoining edges, the adjoined edges being linear 'across the container In the closed position and the edges of each pair of the portionsbeing continuous one with the other at their inner ends; two coactlng' body side walls each having a top portion cooperating with the plural portions to form the closure; one of the side wall portions having its edge disposed substantially linear with and adjoining the hrst adjoining edges; and an extension continuous with the top portion of the other side wall and being attached to the outer surface of the ilrst-mentioned top side wall portion; said extension providing, at its base, single-ply parts above said pairs of adjoined edges; whereby the single ply paperboard above one of said pairs of edges may be severed, so that the adjacent parts of said side wall portions, together with the outermost portions of said plural end wal] portions, may then be expanded, whereby to expose the continuous end edges thereat, so that the latter may then be grasped and drawn outwardly to also draw said plural portions outwardly for forming a pouring spout. 12. A carton comprising an end closure having 9. rectangular under panel including a main triangular portlon and two triangular flaps which are folded on said portion, said flaps having two of their edges adjoining; an outer panel having a rectangular end part covering said flaps, said end part including two triangular flaps which register in Hat covering relation with the first ilaps; said second triangular flaps having therebetween a. breakable line which registers with said adjoining edges and the respective registered 118155 being also registered with and above said main triangular portion, so that when said line is broken the registered pairs oi llaps may be turned upwardly into substantial vertical positions, whereby said main portion may then be drawn outwardly in order to also draw the second-mentioned pair of triangular naps from the other pair of triangular I1aps,_so as to funn 9. pouring spout. 13. A carton comprising four body folds having thereon end closure panels which form a continuous extension thereof, said panels including an under member; a second under member Including a main triangular portion and two triangular sub-panels which are folded on said portion, said subpanels having two of their edges adjoining along the center of the main portion; a Side panel, an outer covering side panel having one oi' its margins adhesively attached to the other side panel; said covering Panel having an end part including `two triangular sub-panels which register with and above the drst subPanels, said second sub-panels having therebetween a breakable line which registers with said adjoining edges. so that when said line ls broken the registered pairs of sub-panels may be turned upwardly, whereby said main portion may then be drawn outwardly so as to draw said registered pairs of sub-panels apart in order that a spout Opening may be formed. 14. A carton constructed from a blank of paperboard comprising an end closure having a rectangular under panel including a main triangular portion and two triangular sub-panels, said sub-panels having two of _their edges adjoining along the center of said portion; a side panel, an outer covering side panel

having one of its margins adhesively attached to the nrst side panel; said **covering** panel having an end part including two triangular sub-panels which register with the Iirst two sub-panels, said second two sub-panels having therebetween a breakable line which registers with said adjoining edges, so that when said line is broken the registered pairs of sub-panels may be lifted upwardly and turned backwardly, whereby said main portion with its sub-panels may tend to spring forwardly to form an **open** pouring spout, the last-mentioned subpanels having their outer edge portions substantially continuous with the adjoining edge portions of the sub-panels ot said outer **covering** panel. 15. A **closure** and **dispensing** spout for a paperboard carton having four coactlng body-forming panels, comprising four **united** flaps which extend from Said panels, said tiaps including an inner side member and an outer **covering** side member permanently **sealed** to the first member, said outer member having therein at one oi' its ends an easily severable line and there being a hinged sub-ilap on each of the opposite sides of said line, and an end member disposed in folded relation below the sub-naps, so that when the paperboard is severed on said line the sub-flaps may be swung into substantially **open** position, whereby the folded end flap may then be drawn outwardly to form an **open** spout. n,1'm,sso 16. A carton constructed of a blank of paperboard comprising four body-:forming panels and four **united** **closure** naps which extend from said panels; said flaps including a pair of side members and **sealing** means therefor, said means including an extension on one of said members, said extension being engaged in overlapping relation on the other member; a second pair of members folded in Huted relation under the iirst members, one of said tiuted members in association with parts of the nrst members being adapted to form a pouring spout ; two side portions of the lasnmentioned iiuted member being triangular and having adjoining edges in the folded position, said **sealing** means being provided with a weakened **openable** line above said edges; said side portions having thereunder a connecting triangular portion, the apex of said latter portion being innermost, whereby when said means are **opened** on said line the side portions and said associated parts may be drawn outwardly, so that said apex may then be reached for also drawing out said connecting portion whereby to form the spout. I 17. A **packaging** and **dispensing** carton comprising front and back. and end body walls having four Hales extending therefrom and forming a **closure**. said iiaps including an under side member, an opposite outer side member having 9. marginal side portion permanently attached to the nrst member, and an end member folded in fluted relation below the flrst members, the side portions of the end member being continuous with the end portions of the side members, said outer side member having above the folded member a temporarily **sealed**, severable portion, said folded end member being adapted, when said severable portion is severed, to be drawn outwardly to form a **dispensing** spout. ' DUR-YEA



9) Family number: 20025819 (GB525098A)

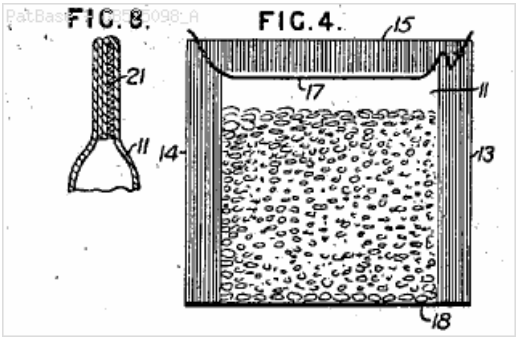
Title:	Improvements in **packages**

Family:

Publication number	Publication date	Application number	Application date
GB525098 A	19400821	GB19390005094	19390216

Probable Assignee:	PAD Y WAX CO INC
Assignee(s):(std):	PAD Y WAX CO INC ; PAD Y WAX COMPANY INC
Assignee(s):	THE PAD Y WAX COMPANY INC
International class (IPC 8-9):	B65D75/58 B65D75/68 (Advanced/Invention); B65D75/52 (Core/Invention)
CPC:	B65D75/5805 B65D75/68
European class:	B65D75/58B B65D75/68
Classification Explorer	
Forward Citations:	WO8602908, US2443484, US2440022, EP0183064, AU579425,

Abstract:
Source: GB525098A [Class 94 (ii)] An envelope type **package** or **container** for either solid or liquid materials is made from a sheet of flexible material which is doubled upon itself along a transverse median line 18, Fig. 4; and the opposed portions of the thus doubled sheet directly **sealed** to one another along their otherwise **open** marginal portions 13.. 15 to form hermetically closed margins. The **package** is preferably made from flexible heat-**sealable** material, which may be transparent, the **sealing** being effected by 'the application of heat and pressure. Preferably, also, the material is crimped simultaneously with the heating and pressing and in one form, Fig. 1, (not shown) the crimping is applied along the 'closed bottom of the **package**, adjacent to the fold of the original blank. A thread or string 17 to facilitate **opening** may be secured within the top corners, with the intermediate part of, its length within the inner space 11 of the **package**. In a modification, Fig. 7 (not shown), the two upper edges of the folded blank are each doubled over inwardly to provide four thicknesses of material which are **sealed** and crimped together. In a further modification, Fig. 8, adapted to facilitate reclosure of the **package** after **opening**, a strip 21 of metal foil or like material is located within one or both of the doubled-over edges of the **package**. After **opening**, the **package** may be reclosed by bringing the originally **sealed** portions back into contact and then doubling them over, with the foilincluding side outermost.



10) Family number: 21360025 (US2222502A)

Title:	Draft control
Priority:	US19380238490 19381102 US19400332672 19400501

Family:

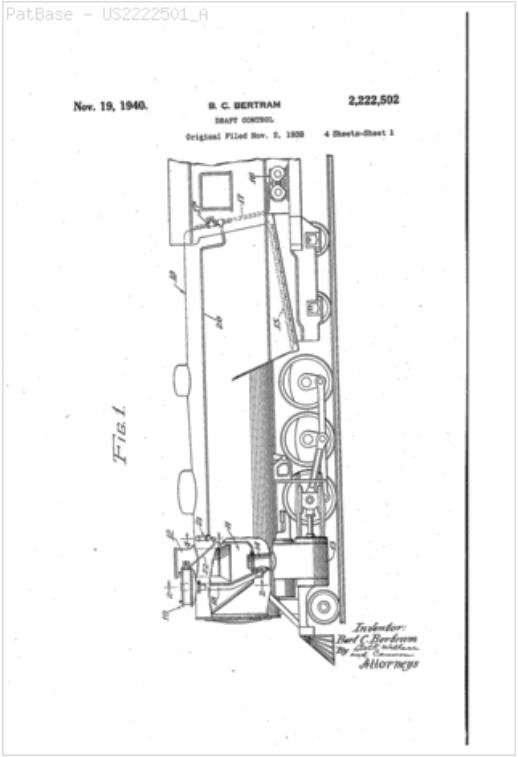
Publication number	Publication date	Application number	Application date
US2222501 A	19401119	US19380238490	19381102
US2222502 A	19401119	US19400332672	19400501

Probable Assignee:	BERTRAM BERT C
Assignee(s):(std):	BERTRAM BERT C
Inventor(s):(std):	BERTRAM BERT C
International class (IPC 8-9):	F23L17/16 (Advanced/Invention); F23L17/00 (Core/Invention)
International class (IPC 1-7):	F23L17/16
CPC:	F23L17/16
European class:	F23L17/16
US class:	110/150 417/157
Classification Explorer	
Forward Citations:	US2516440, US2479502,

Abstract:
Source: US2222502A ` I claim: _ _lt; 1. In a device of the class described, the combination of s. flre box, a. grate in said iire box, said grate having more than twenty-two percent of the area thereof devoted to air openings but wherein not more than substantially forty per- cent of the area thereof is devoted to air openings, a draft appliance for inducing a draft in said tire box and including a. steam exhaust passage terminating in e. discharge nozzle, and a. control for said draft appliance, said control including means providinig an outlet to the atmosphere from said exhaust passage in advance of said discharge nozzle, valve means responsive to steam pressure in said exhaust passage for regulating the discharge of steam from said pa§s.ge through said outlet and which valve means is constructed and arranged to open whem predenemmed steam pressure is established in said passage, and means operable to delay the closing of said valve means upon decrease in the pressure in said passage and functioning, to cause the valve means to remain open after decrease in the pressure below said predetermined. pressure for a period ol' tlme proportionate 'to the degree of pressure above said predetexmlned pressure that has been effective to open said valve means. ~ ` 2. In a device of the class described, the combination of a fire box, a grate in said me box, said grate having more than twenty-two percent of the area. thereof devoted to air openings but wherein not more than substantially forty percent of the area thereof is devoted to air openings, a draft appliance for inducing a. draft in said fire box and imxluding a. steam exhaust passage terminating in 9. discharge nozzle, and a. control iorsald draft appliance, said control including means providing an outlet to the atmosphere from said exhaust passage in advance of said discharge nozzle, valve' means in said outlet and responsive to steam pressure in said exhaust passage for regulating the discharge of steam from said passage through said outlet and which valve means ls constructed and arranged to open when a. steam pressure above a predetermined steam pressure `is established in said passage, and means included in said valve means and operable to delay the closing of said valve means upon decrease in the pressure in said passage and functioning to cause the valve means to remain open after decrease in the pressure below said predetermined pressure for a period of time proportionate tothe degree of pressure above said predetermined pressure that has been effective to open said valve means. 3. In a device of the class described, the comblnation of a Ure box, -a. grate in said fire box, said grate having more than twenty-two percent of the area thereof devoted to air openings but Wherein not more than substantially forty percent of the area thereof is devoted to air openings, s. draft appliance for inducing a draft in said me box and including a. steam exhaust passage terminating in a discharge nozzle, and B. control for said draft appliance, said control including means providing an outlet to the atmosphere from said exhaust passage in advance of said discharge nozzle, valve means in said outlet for regulating discharge of steam from said passage through said outlet, means responsive to steam pressure in said exhaust passage for operating said valve means and which pressure responsive means is constructed and arranged to open said valve means when a steam pressure above a predetermined steam pressure is established, in said passage, and means interposed between 'the pressure responsive means and said exhaust passage and operable to delay the closing of said valve means uprn decrease in the pressure in _Said passage and functioning to cause the valve means to remain open after decrease in the pressure below said predetermined pressure tor a period of time proportionate to the degree of pressure above said predetermined pressure that has been effective to open said valve means. 4. In a device of the class described. the combination of a tire box; ‘a grate in said ire box, said graze having more than twenty-two percent of the ares. thereof devoted to air openings but wherein not more than substantially forty per- T6 cent of the area thereof is devoted to air 013911- lngs. a draft appliance for inducing a draft in said tire box and including a steam exhaust passage terminating ln a discharge nozzle, and a control for said draft appliance, said control including means providing an outlet to the atmosphere from said exhaust passage in advance of said discharge nozzle, valve means responsive to steam pressure in said exhaust passage for regulating the discharge of steam from said passage through said outlet and which valve means is constructed and arranged to open when a steam pressure above a predetermined steam pressure is established in said passage and which valve means includes means wherein steam from said passage ls entrapped upon the opening of said valve means, and means for delaying the escape of entrapped steam to a predetermined rate independently of and upon decrease in the pressure whereby said valve means remains open after decrease in the pressure below said predetermined pressure for a period of time proportionate to the degree of pressure above said predetermined pressure that has been etfective to open said valve means. 5, In a device of the class described, the combination of a fire box, a gra-te in said Zire box, said grate having more than twenty-two percent of the area thereof devoted to air openings but wherein not more than substantially forty percent of the area. thereof is devoted to air openings, a draft appliance for inducing a draft in said nre box and includinga steam exhaust passage terminating in a discharge nozzle, and a control for said draft appliance, said control including means providing an outlet to the atmosphere from said exhaust passage in advance of said discharge nozzle, valve means in said outlet and responsive to steam pressure in said exhaust passage for regulating the discharge of steam from said passage through said outlet and which valve means is constructed and arranged to open when a steam pressure above a predetermined steam pressure is established in said passage and which valve means includes means wherein steam from said passage is entrapped, and means including a restricted passage provldlng for the escape of entrapped steam at a predetermined rate independently of ,and upon decrease in the pressure whereby said valve means remains open after decrease in the pressure below sald predetermined pressure for a period of time proportionate to the degree of pressure above said predetermined pressure that has been effective to open said valve means. 6. In a device of the class described, the C0111- hination of a nre box, a grate ln said flre box, said grate having more than twenty-two percent of the area thereof devoted to air openings but wherein not more than substantially forty percent of the area thereof is devoted to air openings, a draft appliance for inducing a. draft in said tire box and including a steam exhaust passage terminating in a discharge nozzle, and a control for said draft appliance. said control including means providing an outlet to the atmosphere from said exhaust passage in advance of said discharge nozzle, valve means in said outlet for regulating discharge of steam from said passage through said outlet, means responsive "tbé steam pressure ln said exhaust passage for operating said valve means and which pressure responsive means is constructed and arranged to open said valve means when a steam pressure above a predetermined steam pressure is established ln said passage, and means interposed between lthe pressure responsive means and said exhaust passage and wherein steam from said passage ls entrapped and including means for delaying the escape of entrapped steam therefrom to a predetermined rate independently of and upon decrease in the pressure whereby said valve means remains open after decrease in the pressure below said predetermined pressure for a period of time proportionate to the degree of pressure above said predetermined pressure that has been eifective to open said valve means, 7. In a device of the class described, the combination of a dre box, a grate in said fire box, said grate having more than twenty-two percent of the area thereof devoted to air openings but wherein not more than substantially forty percent of the area thereof is devoted to air open- _lngs, a draft appliance for inducing a draft in said tlre box and including a steam exhaust passage terminating ln 9. discharge nozzle, and a control for said draft appliance.

said control including means providlng an outlet to the atmosphere from said exhaust passage in advance of said discharge nozzle, and valve means responsive to steam pressure in said exhaust passage for regulating the discharge of steam from said passage through said outlet and which valve means ls constructed and arranged to **open** when predetermined steam pressure is established in said passage and to remain **open** after decrease of such pressure below said predetermined pressure for a period of time proportionate to the degree of pressure impressed thereon above said predetermined pressure. ~8. In a device of the class described, the combination of a tire **box**, a grate in said fire **box**, said grate having more than twenty-two percent of the area thereof devoted to air **openings** but wherein not more than substantially forty percent of the area thereof is devoted to air openlngs, a draft appliance for inducing a draft in said tire **box** and including a steam exhaust pmsage terminating in a discharge nozzle, and a control for said draft appliance, said control lncludlng means providing an outlet to the atmosphere from said exhaust passage in advance of said discharge nozzle, and valve means in said outlet and including means constructed and arranged to **open** and permit discharge of steam through said outlet when predetermined steam pressure ls established in said passage and to remain **open** after decrease of such pressure below said predetermined pressure for a period of time proportionate to the degree of pressure impressed thereon above said predetermined pressure. 9. In a device of the class described, the combination of a me **box**, a grate in said Ere **box**, said grate having more than twenty-two percent of the area thereof devoted to air **openings** but wherein not more than substantially forty percent oi the area thereof is devoted to air **openings**, a draft appliance for inducing a draft in said nre **box** and including a steam exhaust passage terminating ln a discharge nozzle, and a control for said draft appliance, said control lncludlng means providing an outlet to the atmosphere from said exhaust passage in advance of said discharge nozzle, valve means ln-said outlet for regulating discharge of steam from said passage through said outlet, and means responsive to steam pressure in said exhaust passage for operating said valve means and which pressure responslve means is constructed and ar- so ss W ranged to **open** said valve means when predetermined steam pressure is established in said passage and to maintain said valve means **open** after decrease of such pressure below said predetermined pressure for a. period of time proportionate to the degree of pressure impressed thereon above said predetermined pressure. 10. In a device of the class described, the combination of a. Hre **box**, B. grate in said tire **box**, said grate having more than twenty-two percent of the area thereof devoted to air **openings** but wherein not more than substantially forty percent of the area thereof is devoted to air **openings**, a draft appliance for inducing a draft in said fire **box** and including 2. steam exhaust passage terminating in B, discharge nozzle, and a control for said draft appliance, said control including means providing an outlet to the atmosphere from said exhaust passage in advance of said discharge nozzle, valve means for regulating the discharge of steam from said exhaust passage through said outlet, means for operating said valve means to effect discharge of steam from the exhaust passage through said outlet in za, degree proportionate to the steam pressure in said exhaust passage, a,nd'means for rendering the operating means unresponsive to such steam pressure variations as are induced in the exhaust passage as an incident to the intermittent admission thereto of steam from the cylinders of the locomotive. 11. The improvement in locomotive draft all-' piiance controls, Where the appliance includes 2, steam exhaust passage terminating in a. discharge nozzle and where the appliance induces a. draft through a iire **box** to which fuel is supplied by a. stoker operated by a. manually-cork trolled steam-operated engine, which improvement consists in means providing an qutlet to the atmosphere from said. exhaust passage in advance of said discharge nozzle, valve means responsive to steam pressure in said exhaust DESsage for regulating the discharge of steam from said passage through said outlet and which valve means is constructed and arranged to **open** when predetermined steam pressure is established in said passage and to remain **open** after decrease of such pressure below said predetermined pressure for a period of time proportionate to the degree of pressure impressed thereon above said predetermined pressure, valve control means operative to prevent **opening** of said valve means until a. steam pressure greater than the aforesaid predetermined steam pressure is established in said exhaust passage, and means operable under the control of the aforesaid manual control, when said manual control is operated to cause said engine to operate the Stoker at a predetermined fuel feed rate, to render said valve control means 'operative as aforesaid. 12. The improvement in locomotive draft appliance controls, where the appliance includes a steam exhaust passage terminating in a. discharge nozzle aud where the appliance induces B. draft through a. ire **box** to which fuel is supplied by 2. stoker operated by a. ma.nua.11y-controlled steam-operated engine, which improvement consists in means providing an outlet to the atmosphere from said exhaust passage in advance of said discharge nozzle, valve means in said outlet and including means constructed and arranged to **open** and permit discharge of steam through said outlet when predetermined steam pressure is established in said passage and to remain **open** befpre deerease Df such pressure below said predetermined pressure for a. period of time proportionate to the degree of pressure impressed thereon above said. predetermined pressure, valve control means operative to prevent **opening** of said valve means until 9. steam pressure greater than the aforesaid predetermined steam pressure is established in said exhaust passage, and means operabm under the control of the aforesaid manual control, when said manual control is operated to cause said engine to operate the stoker at a predetermined fuel feed rate, to render said valve control means operative as aforesaid. 13. The improvement in locomotive draft appliance controls, where the appliance includes a steam exhaust passage terminating in a, discharge nozzle and where the appliance induces a draft through a Ere **box** to which fuel is supplied by a. stoker operated by a manually-controlled steamoperated engine. which improvement consists in means providing an outlet to the atmosphere from said exhaust passage in advance of said discharge nozzle, valve means in said outlet for regulating discharge nf steam from said passaie through said outlet. means responsive to steam pressure in said, exhaust passage for operating said valve meansss and which pressure responsive means is constructed and ,arranged to **open** said valve means when predetermined steam pressure is established in said passage and to maintain said valve means **open** after decrease of such pressure below said predetermined pressure for a period of time proportionate to the degree uf pressure impressed thereon above said predetermined pressure, valve control means operative to prevent **opening** of said valve means until a. steam pressure greater than the aforesaid predetermined steam pressure is established in said exhaust passage, and means operable under the control of the aforesaid manual control, when said manual control is operated to cause said engine to operate the stoker at a, predetermined fuel feed rate, to render said valve control means operative as aforesaid. 14, The improvement in locomotive draft appliance controls, where the appliance includes a. steam exhaust passage terminating in a. discharge nozzle and where the appliance induces a. draft through 9. fire **box** to which fuel is supplied by a. stoker operated by a, menua.11y-controlled steamoperated engine, which improvement cqnsists in means providing an outlet to the atmosphere from said exhaust passage in advance of said discharge nozzle, valve means including interengageable parts normally urged into engagement one with the other to close Off How of steam from said exhaust passage through said outlet until a. predetermined steam pressure is built up in said exhaust passage, operating means for effecting separation of said interengageable parts to permit how of steam from said exhaust passage through said outlet in a. degree proportionate to the steam pressure in said exhaust passage, said operating means including a chamber into which steam from said exhaust passage may be admitted to build up pressure therein `and thereby effect separation ofsaid interengageable parts, said operating means also including means aifording a, restricted passage between said exhaust passage and said chamber and through which steam flows slowly from and to said exhaust passage to and Yroin said chamber whereby said operating means is rendered unresponsive to such steam pressure variations as are in- duced in said exhaust passage as an incident to the intermittent admission thereto of steam from the `cyllnders of the locomotive, valve control means operative to increase the force by which said interengageable parts are urged into engagement with each other and operative to prevent separation of said interengageable parts until a pressure greater than the aforesaid predetermined pressure is built up in said exhaust passage, and means operable under the control of the aforesaid manual control, when said manual control is operated to cause said engine to operate the stoker at a predetermined fuel feed rate, to render said valve control means operative as af oresald

PatBase - US2222501_A



Nov. 19, 1940. B. C. BERTRAM 2,222,502

DRAFT CONTROL

Original Filed Nov. 2, 1938 4 Sheets-Sheet 1

FIG. 1

Inventor:
Burl C. Bertram
By
Attorneys

11) Family number: 21382421 (US2224850A)

Title:	DISPLAY AND SHIPPING **PACKAGE**
Priority:	US19380246772 19381220

Family:

Publication number	Publication date	Application number	Application date
US2224850 A	19401217	US19380246772	19381220

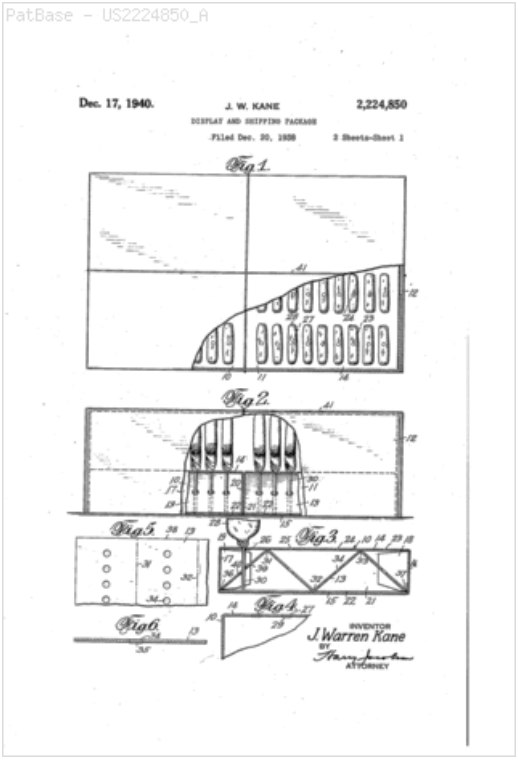
Probable Assignee:	INT FOLDING PAPER BOX CO
Assignee(s):(std):	INT FOLDING PAPER BOX CO ; INTERNAT FOLDING PAPER BOX CO
Assignee(s):	INTERNATIONAL FOLDING PAPER BOX CO INC
Inventor(s):(std):	WARREN KANE J
Inventor(s):	KANE J WARREN
International class (IPC 8-9):	B65D5/50 B65D85/60 B65D85/78 (Advanced/Invention); B65D5/50 B65D85/60 B65D85/72 (Core/Invention)
International class (IPC 1-7):	B65D5/52 B65D85/60
CPC:	B65D5/5059 B65D5/5061 B65D85/60 B65D85/78
European class:	B65D5/50D4G B65D5/50D4G2 B65D85/60 B65D85/78
US class:	206/763 426/124

Classification Explorer

Forward Citations: WO04041665, US7320406, US2005224390, EP1567421,

Abstract:
Source: US2224850A I claim: 1. The combination with a **box** having a top, bottom, ends and a movable side iiap **closure**, the top having spaced apertures therein, of an interior bracing and article supporting sheet loosely inserted into the **box** through an **open** side thereof with the end edges of the sheet in engagement with the ends of the **box**, said sheet having parallel spaced transverse score lines therein and having a plurality of apertures between the score lines each of greater diameter than that of the apertures in the top, said sheet being bent on said score lines into M-shaped form to provide nat and comparatively rigid inclined sections between the score lines, each of said sections extending between and being in contact with the top and bottom of the **box**, corresponding apertures in the top and in said sheet being in vertical alignment to permit the Vertical passage of the stick of a stick confection therethrough with the end of the stick in contact with the bottom. _2, In a combined display and shipping **package** for lollypops, a pair of similar boxes each having apertures in the top thereof, a bracing sheet within each **box** provided with apertures in vertical alignment with, and of greater diameter than, the apertures in the top of the **box**, the bracing sheet being bent along spaced parallel score lines to provide a multiplicity of angularly arranged sections thereon separated by folds and to impart a flattening tendency thereto, the ends oi' said sheet contacting with the ends of the **box** and the alternate folds contacting with the top and bottom of the **box** respectively, said boxes being arranged in side to side contact, a plurality of lollypops each provided with a stick, the stick of each lollypop being passed through an aperture in the top of a **box** and through a corresponding aligned' aperture of the sheet, and an outer **box** **open** at its bottom and having a closed top resting onthe lollypops. 3. A combined shipping and display **package** for confections each provided with a stick, comprising a pair of boxes arranged in side by side relation and each having an apertured top, an apertured bent bracing sheet within the **box**, the stick of each confection passing through an aperture of the top and a corresponding aperture of the sheet, an outer **covering** **box** **open** at its bottom and having a top resting on the confections, and means for detachably securing the boxes together whereby removal of the **covering** **box** exposes the first-mentioned pair of boxes for display. 4. A combined shipping and display **box** for stick confections comprising a **box** having an apertured top, and a bracing sheet having spaced parallel score lines 'completely thereacross and having apertures therein of larger diameter than the apertures of said top, said sheet being loosely inserted into the **box** with the apertures thereof in vertical alignment with the corresponding apertures of the top and with the ends thereof braced against the ends of the **box**, said sheet being bent about said score lines in position to arrange the material at alternate lines in pressed contact With the Inner face of the top of the **box** and to arrange the material at the remaining score lines In contact with the bottom of the **box**, the sections of the sheet between the score lines being each arranged in an inclined position. 5. A combined shipping and display **box** comprising a **box** having a top, bottom, sides and ends, the top having a plurality of apertures of one size therein, and a combined bracing and supporting sheet loosely inserted within the **box** and coextensive therewith, said sheet having apertures of a larger size therein each vertically aligned with an aperture of the **box** top, said sheet being bent along parallel lines to provide angularly disposed sections on said sheet extending between and contacting with the top and bottom of the **box**, the end edges of said sheet being braced against the ends of the **box**, and at least one of the sides of the **box** being **openable** for the insertion therethrough and into the **box** of said sheet. ' 6. The combination with a **box** having an apertured top, of a combined bracing and supporting sheet having an area greater than that of said top, said sheethaving apertures therein corresponding to and aligned with but larger than the apertures of the-top, said sheet being bent into angularly arranged sections along transverse parallel lines and being fitted slidably into the **box** with the end. edges thereof braced against the ends of the **box**, said sections extending angularly and rigidly between and bracing the top and bottom of the **box**. '7 _ The combination with a **box** having an apertured top, and having a. bottom, sides and ends, of a bracing and supporting sheet loosely inserted into the **box** with the end edges thereof braced against the ends of the **box**, said sheet being apertured correspondingly to the apertured top, and said sheet being of generally M-shaped form to provide a series of nat and comparatively rigid inclined transverse sections therein extending be~ tween and bracing the **box** top and bottom and in contact therewith. 8. A **box** having a perforated top, and means for bracing the top and for also cooperating with the top to support stick confections including a. perforated sheet arranged loosely in the interior of the **box** and extending between a. pair of opposed faces thereof, said sheet being bent along the transverse parallel lines into 9. plurality of inclined perforated sections, the respective perforations of the sections which correspond to the perforations of the top being in substantial vertical alignment. 9. A **box** having a perforated top and means for bracing the top and for also cooperating with the top to support stick confections, said means including a sheet loosely arranged in the interior of the **box** and engaging the **box** at its end edges, said sheet having a plurality of sections therein each bent into sn position inclined at an angle other than a right angle to the **box** top and each perforated correspondingly to the top with perforations of greater diameter than those of the top. _ 10. A **box** having a. perforated top and means for bracing the top and for also cooperating with the top to support stick confections, said means including a. first sheet loosely arranged in the interior of the **box** and engaging the **box** at its end edges, said sheet having a plurality of sections therein each bent into a position inclined at an angle other than a, right angle to the **box** top and each perforated correspondingly to the top, and an additional bracing sheet cooperating with the frst sheet to brace the top, said additional sheet having a pair of sides joined by a top, the bottom edges of the sides engaging the first sheet and the top of the additional sheet engaging the **box** top. 11. A **box** having a top provided with apertures for the vertical passage therethrough of the sticks of stick coniections, a bracing sheet in the **box** having sections inclined to the top and provided with apertmres corresponding to those in the top for the passage therethrough of the lower parts of said sticks, and bracing inserts in the **box** each having a top and depending sides, the top engaging the **box** top and the sides being arranged in position to engage the sticks with the lowermost edges of said. sides engaging the inclined sections of the bracing sheet. 12. A **box** having an apertured top, a bracing sheet having inclined apertured sections inclined to the top, said sheet being loosely inserted into the **box** and held at its end edges by the **box** against distortion, said sections being of lesser height than that of the **box**, and bracing members interposed between and engaging the **box** top and the bracing sheet and transmitting stresses therethrough from the **box** top to the sheet and thereby bracing the top against yielding and collapse. 13. A **box** having an apertured top, a bracing sheet in the **box** having apertured sections inclined to the top, and bracing members in the **box** resting on the sheet and engaging the **box** top. 14. A **box** having a perforated top and having imperforate sides, ends and a bottom, and a sheet arranged in the interior of the **box** and bent along transverse parallel lines into inclined substantially rigid triangular sections extending between and bracing the **box** top and bottom and in contact therewith, said sheet being perforated correspondingly to the perforated top, and the end edges of the sheet being in pressed contact with the **box** ends. 15. A **box** provided with a top having unstripped punchings therein adapted to be stripped therefrom to form apertures in said top, and a sheet within the **box** having corresponding unstripped punchings therein of larger diameter

than those of the tcp, said sheet being bent into inclined substantially rigid triangular sections extending between and bracing the **box** top and bottom and in contact therewith, said punchings being strippable from the top and sheet by the pressure of the stick of a stick confection. 16. A **box** provided with a, top having unstripped punchings therein adapted to be stripped therefrom to form apertures in said top, said **box** having imperforate sides, ends and a bottom, and a sheet within the **box** having corresponding unstripped punchings therein of larger diameter than those of the top, said sheet being bent along transverse lines into inclined substantially rigid triangular sections each extending between and contacting with the **box** top and bottom, the end edges of the sheet being in pressed contact with the **box** ends, said punchings being strippable from the top and the sheet by manual pressure applied thereto by the stick of a stick confection, said stick being supported in vertical position by the walls of the apertures produced by the stripping of the punchings. J.



12) Family number: 21032793 (US2248471A)

Title:	PACKAGING METHOD AND MACHINE
Priority:	US19380210041 19380525

Family:

Publication number	Publication date	Application number	Application date
US2248471 A	19410708	US19380210041	19380525

Probable Assignee:	PAD Y WAX CO INC
Assignee(s):(std):	PAD Y WAX CO INC ; PAD Y WAX COMPANY INC
Assignee(s):	THE PAD Y WAX COMPANY INC
Inventor(s):(std):	STROOP JOHN H
International class (IPC 8-9):	B65B9/06 (Advanced/Invention); B65B9/06 (Core/Invention)
International class (IPC 1-7):	B31B23/60 B65B9/06
CPC:	B65B9/06
European class:	B65B9/06
US class:	206/484 53/133.7 53/412 53/451 53/552

Classification Explorer

Forward Citations: WO14016510, WO02100722, US9751273, US9434106, US9238343, US8523437, US8449843, US8216529, US8132395, US8029428, US8012076, US7516596, US7445590, US7320545, US7165887, US7086782, US6913387, US6910806, US6648044, US6635139, US6588177, US6360513, US5722215, US5465558, US5149065, US5127208, US4999975, US4999968, US4617781, US4524567, US4364220, US3295289, US3197939, US2984958, US2899875, US2889671, US2866392, US2836291, US2772530, US2685770, US2627213, US2597041, US2546721, US2518423, US2462254, US2435560, US2011160029, US2010068097, US2010011711, US2009305859, US2009162496, US2009098992, US2008312056, US2008300121, US2007167304, US2006140514, US2005238766, JP57117302, JP53063188, JP51135781, FR2993864, DE1129044,

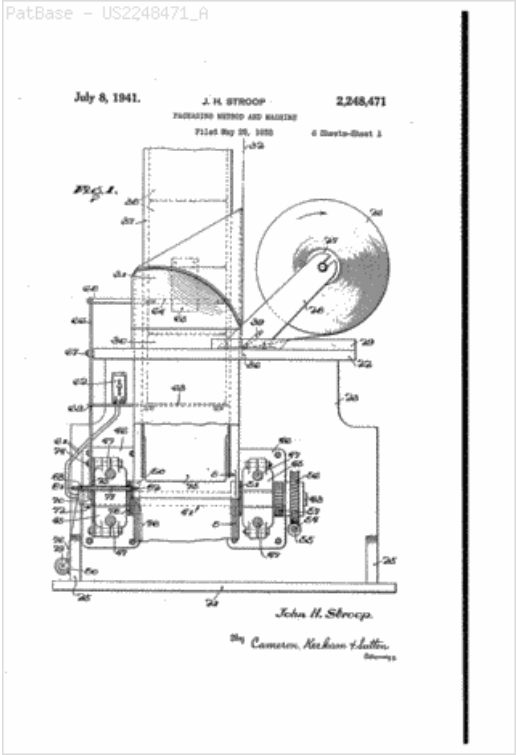
Abstract:

Source: US2248471A What is claimed is: 1. A method of **packaging** commodities in **containers** formed of a flexible material comprising the steps of forming a continuous **seal** between the marginal portions of opl_gt;0Sed thicknesses of the **Packaging** material while continuously moving said material in a direction parallel to said marginal portions, **sealing** together at intervals transversely extending areas of said opposed thicknemes to form a series of **sealed** envelopes, maintaining the portions of said opposed thicknesses other than sald **sealed** marginal portions in spaced apart relation at all times other than during the formation of said transversely extending **seals** and independently of the commodity to be **packaged** so as to form envelopes oi' predetermined volumetric characteristlcs, and depositing a commodity in each of said envelopes prior to the completion of the **sealing** oi' the marginal portions of said opposed thicknesses of **packaging** material bounding that particular envelope. 2. `A method of **packaging** commodities as defined inclaim 1including the step of crimping the **sealed** portions of the **packaging** material simultaneously with the **sealing** thereof so as to stiflen the edges of the individual envelopes. 3. A method of **packaging** commodities as deilned in claim 1 including the step of associating **container opening** means with each of said envelopes substantially simultaneously with the **sealing** thereof. 4. A method of **packaging** commodities as defined in claim 1 including the steps of cutting the **packaging** material transversely within theconilnes of each of said transversely extending **sealed** areas to separate each of said envelopes from the others, and associating **container opening** means with each of said envelopes prior to said cutting operation. 5. A method of **packaging** conunoditieg in **containers** formed of a nexible material comprising the steps of forming a single sheet of the **packaging** material into a U shape, the blght of the ,U extending along the longitudinal center line of the sheet, **sealing** the opposed marginal areas of said sheet together, **sealing** transversely extending areas of the opposed portions of said sheet to one another, said last named areas being spaced along and ot limited width in the longltudinal direction of said sheet but extending entirely across the sheet so as to form successive. **sealed**, commodity containing spaces, associating a **container opening** thread-like member with each of said commodity containing spaces prior to the completion of said **sealing** operations, said thread-like member being so placed that the major portion of its length lies within the commodity oontalning space while its extremities PBSS through the transversely **sealed** areas form~ ing the end edges of each space, and flllng said commodity containing spaces with commodities during and prior to the completion o! said **sealing** operations. 6. A method of **packaging** commodities in **containers** formed of a tlexible material comprising the steps of forming a single sheet of the **packaging** material into a U shape, the blght of the U extending along the longitudinal center line of the sheet, doubling eachot the marginal portions of said sheet individually to form a reinforced edge for the iinished **packages**, **sealing** the opposed, doubled marginal portions of said sheet together, **sealing** transversely extending areas of the opposed portions of said sheet to one another, said areas being spaced along and of limited width in the longitudinal direction of said sheet but extending entirely across the sheet so as to form successive, **sealed**, commodity containing spaces, and iilling said commodity containing spaces with commodities prior to the completion of said **sealing** operations. 7. A method of **packaging** commodities in **containers** formed of a :dexible material comprising the steps of forming a single sheet oi' the **packaging** material into a U shape, the blght oi' the U extending along the longitudinal center line ot the sheet, doubling each of the marginalportlons of said sheet individually to Iorm a reinforced edge for the finished **packages**, associating a strip of reinforcing material with at least one of the doubled marginal portions of said sheet, **sealing** the opposed, doubled marginal portions of said sheet together, **sealing** transversely extending areas of the opposed portions of said sheet to one another, said areas being spaced along and of limited width in the longitudinal direction of said sheet but extending entirely across the sheet so as to form successive, **sealed**, commodity containing spaces, and filling said commodity containing spaces with commodities prlor to the completion of said **sealing**' operations. 8. In a **packaging** machine of the type adapted to form commodity containing **packages** out of a flexible **packaging** material, the combination of means for forming a web _of said **packaging** material into a U shape, the blght of the U extending along the longitudinal center line of the web, means for efecting a continuous **seal** between the opposed marginal portions of said U shaped web, means for **sealing** together transversely extending areas oi' the opposed portions of said web at spaced points along its longitudinal direction so as to form successive, **sealed**, commodity containing **packages**, means independent of the commodity being **packaged** for maintaining the opposed portions of the web intermediate the marginal portions thereof in spaced apart relation at all times other than during the operation of said transverse **sealing** means, and means for filling said **packages** with commodities during and prior to the completion of the **sealing** thereof, both of said **sealing** means being positioned closely adjacent but beyond the point of discharge of said filling means. 9. In a **packaging** machine of the type adapted to form commodity containing **packages** out of a flexible, heat **sealable** **packaging** material, means for forming aweb of said **packaging** material into a relatively narrow U shape, the blght of the U extending along the longitudinal center line of the web, means for applying heat and pressure to the opposed marginal portions of said U shaped web to eifect a continuous **seal** therealong, means for applying heat and presure to transversely extending areas ggthe opposed portions or said web at spaced points along its longitudinal dlrection so as to form successive, hermetically **sealed**, commodity containing **packages**, means independent of the commodity being **packaged** for maintaining the opposed portions of the web intermediate the marginal portions thereof in spaced apart relation at all times other than during the operation of said transverse **sealing** means, and means for filling said **packages** with commodities during and prior to the completion uf the **sealing** thereof, both of said **sealing** means being positioned closely adJacent but beyond the point of discharge of saidilllng means. 10. In a **packaging** machine of the type adapted to form commodity containing **packages** out of a Bexlble **packaging** material, the combination of means for forming a web of said **packaging** material into a U shape. the bight of the U extending along the longitudinal center line of the web, means for eifectlng a continuous **seal** between the opposed marginal portions of said U shaped web, means for **sealing** together transversely extendlng' areas of the opposed portions of said web an spaced points along its longitudinal direction so as to form sdccessive, **sealed**, commodity containing **packages**, and means' for nlling said **packages** with commodities during and prior to the completion of the **sealing** thereof Including a duct for delivering commodities to said **packages** extending inside of said U shaped web and maintaining the opposed portions

thereof a predetermined distance apart at all times other than during the ssoperation of said transverse sealing means, both of said sealing meansbelng positioned closely adjacent but beyond the delivery end of said duct. - 11. In a packaging machine of the type adapted to form commodity containing packages out oi a flexible packaging material, the combination of means- for forming a web of said packaging material into a U shape, the bight of the U extend# ing along the longitudinal center line of the web, a pair of -sealing rotors between which said U shaped web is passed, said rotors being so constructed and arranged as to effect e. continuous seal between the opposed marginal portions of said web and transversely extending seals 'ber tween the opposed portions of said web at spaced points along its longitudinal direction so as to form successive, sealed, commodity containing packages, and means for filling said packages with 'commodities during and prior to the com- _pletion of the sealing thereof, said last named means including a duct for delivering commodities to said packages extending inside of said U shaped web, the delivery end of said duct being positioned' adjacent said sealing rotors and having a yieldably expansive skirt tending to maintain the opposed portions of said U shaped web in spaced' apart relation at all times other than during the formation of said transversely extending seals. ' 12. In a packaging machine of the type adapted to form commodity containing packages out of a flexible packaging-matel'la1,~1;he combination of means for supporting a supply of said packaging material, means for continuously drawing ol-'posed thicknesses of said material from said supply comprising a pair of sealing rotors between which said opposed thicknesses are passed, said rotors being so constructed and arranged as to effect both continuous longitudinally extending and longitudinally spaced transversely extending seals so ss so as between said opposed thiehxewes so as to Iorm successive, sealed, commodity containing packages, and means for 11111113 said packages with commodities during and prior to the completion of the sealing thereof. said last named means including a duct for delivering commodities to said packages extending between said opposed thicknesses and having the delivery end thereof positioned adjacent said sealing rotors, means for maintaining said opposed thicknesses a. predetermined distance apart at all times other than during the formation of said transversely extending seals, and means operative In timed relation to 'the operation oi said sealing rotors forlperladically delivering commodities from said duct into said packages while the latter are being sealed. 18. A packaging machine as denned in claim Including a knife associated with said sealing rotors for cutting the successive packages from the remainder of said packaging material dur# ing the formation of said transversely extending seals. 14. In a packaging machine of the type adapted to form commodity containing packages out of a nexible packaging material, the combination of means for forming a web of said packaging material into a U shape with the bight of the U extending along the longitudinal center line of the web, means for folding the marginal portions of said web inwardly toward the longltudinalcenter line thereof to provide doubled edges for said web, means for sealing the doubled edge' portions of said web together, means for effecting transverselv extending seals between the opposed portions of _said web spaced along and of limited 'width in the longitudinal direction of the web but extending entirely across the latter to form successive, sealed, commodity containing packages, and means for tllllng said packages with commodities. ~ 15. In a packaging machine of the type adapted to form commodity containing packages out of a nexible packaging material, the combination `of means for supporting a rolled web of said packaging material, means for forming said web into a U shape with the bight of the U extending _along the longifudinal center line of the web, means interposed between said supporting means -and said forming means for folding the marginal ,portions of said web inwardly toward the longitudinal center llne thereof to provide doubled edges for said web, means for sealing the doubled edge portions of said web together, means for effecting transversely extending seals between the opposed portions of said web spaced along and of limited width In the longitudinal direction of the web but extending entirely across the latter to form successive, sealed, commodity containing packages, and means for filling said packages with commodities. 16. In a packaging machine of the type adapted to form commodity containing packages out of a ilexible packaging material, the combination of means for supporting a rolled web of said packaging material, means for forming said web into 9, U shape with the blght of the U extending along the longitudinal center line of the web, means interposed between said supporting means and said forming means for folding the marginal portions of said Webinwardly toward the longitudinal center llne thereof to provide doubled edges for said web. said folding lneans comprising a guide member having an edge parallel to the Plane of said web and a pair of slots angularly disposed with respect to said edge. the marllllal portions of said web Passing through said slots while the remainder of the web passes around said edge, means for sealing the doubled edge portions of said web together, means for effecting transversely extending seals between the opposed portions ol' said web spaced alonz and of limited width In' the longitudinal direction of the web but extending entirely across the latter to form successive, sealed, commodity containing packages, and means for filling said packages with commodlties. 17. In a packaging machine of the type adapted to form commodity containing packages out of a ilexlble packaging material, the combination of means for forming a web of said packaging material into a U shape with the blght of the U extending along the longitudinal center line of the web, means for folding the marginal portions of said web inwardly toward the longitudinal center line thereof to provide doubled edges for said web, means for introducing a strip of reinforcing material into at least one of the thus doubled edge portions of' said web, means for sealing jshe doubled edge portions ol' said web together, means for edecting transversely extending seals between the opposed portions of said web spaced along and of limited width in the longitudinal direction of the web but extending entirely across the latter to form successive. sealed, commodity containing packages, and means for iilling said packages with commodities. ` 1B_ In a packaging machine of the type adapted to form commodity containing packages out of a flexible packaging material, means for forming a web of said packaging material into a U shape with the bight of the U extending along the longltudinal center llne of the web comprising means for moving said web longitudinally, and a pair of conical formers over and between which said web is drawn by said moving means, the conical surface of each of said formers being tangent to two planes at right angles to one another, one of said planes being that of the web before its formation into U shape and the other being that of one oi' the opposed portions of said web after its formation into U shape. 19. In a packaging machine of the type adapted to form commodity containing packages out of a flexible packaging material, means for forming a web of said packaglns material into a U shape with the blght of the U extending along the longitudinal center llne of the web and simultaneously eflecting a 180 degrees change in the direction oi its movement comprising means for moving said web longitudinally, and a pair of conical formers over and between which said Web is drawn by said moving means, said formers having apex angles ol' 60 degrees and axes disposed at an angle of 60 degrees relatively to one another, the conical surface of each of said formers being tangent to two planes at right angles to one another, one of said planes being that of the web before its formation into U shape and the other beina that of one of the opposed portions of said web after its formation Into U shape, 20. In a packazlng machine of the type adapted to form commodity containing packages out of a flexible packaging material, the combination of means for forming a web of said packaging material into a U shape with the bight ot the U extending alongthe longitudinal center line of the web, means for sealing the opposed marginal portions of said Web together, meant for elfecting transversely extending seals between the opposed I_gt;0rtlons of said web spaced along and of limited width in the longitudinal direction of the web but extending entirely across the latter to form successive, sealed, commodity con~ taining packages. means for Hllillg said packages with eommodities, and means for associatiI1K package opening means with the successive packages, substantially simultaneously with the sealing of the marginal portions of said web. 21. In a packaging machine of the type adapted to lurm commodity containing packages out of a flexlblepackaging material, the combination of means for forming a web of said packaging material into a. U shape with the blght of the U extending along the longitudinal center line of the web, means for sealing the opposed marginal portions of said web together, means for effecting transversely extending seals between the opposed portions of said web spaced along and of limited width in the longitudinal direction of the web but extending entirely across the latter to form successive, sealed, commodity containing packages, and means for placing a thread-like opening member in each of said packages prior to the complete sealing thereof. 22. In a packaging machine of the type adapted to form commodity containing packages out o_f a flexible packaging material, the combination oI means for forming a web of said pa¢kgg_ ing material into a U shape with the bight of the U extending along the longitudinal center li.ne of the web, means for sealing the opposed marginal portions of said web together, means for edecting transversely extending seals between the Opposed portions of said web spaced along and of limited width in the longitudinal direction of the web but extending entirely across the latter to form successive, sealed, commodity C0l'1t8iI1iDg Packages, and means for associating fi thread-like opening member with each of said Packages prior to the complete sealing thereof C0lI1P1'iSiD8 a needle-like element for normally placing said thread-like member between the ODI-Xlsed portions of said web, and means for reclprocating said needle-like element transversely to the direction of movement of said web to periodically withdraw said thread-like member outWardly beyond the opposed edges of said web, the operation of said reciprocating means being so synchronized with that of said sealing means as to bring said thread-like member outwardly beyond the opposed edges of the web at points 0DPosite said transversely sealed areas. 23- In 5 P_Ckaging machine of the type adapted to form commodity containing packages out of a Hexible packaging material, the combination of means for forming a web of said packaging material into a U shape with the bight of the U €X5€1'1\iiI1€ along the longitudinal center line of the web, a pair of rotatable sealing members between which said U shaped web passes, said members being so constructed and arranged as to elfect a continuous seal between the opposed marginal portions of said web and bo also seal together transversely extending areas of the opposed portions of said web at spaced points along its longitudinal direction so as to form successive, sealed, commodity containing packages, means for filling said. packages with commodities, and means for associating a thread-like opening member with each of said packages comprising a needle-like element for placing said thread_ 11ke_m.ember mounted adjacent said rotatable sealing members for reciprocating movement parallel to the axes of the latter, and means fgr a,s4a,4v1 ll- l y 11 reciprocating said needle-like

element in timed relation to the rotation of said **sealing** members. said reciprocating means being so constructed and arranged as to normally place said threadlike member between the opposed portions of said web but to bring the same outwardly beyond the opposed edges of the web at points opposite said transversely **sealed** areas. 24. In a **packaging** machine of the type adapted to form commodity containing **packages** out of a nexible **packaging** material, the combination of means for forming a web of said **packaging** material into a U shape with the bight of the U extending along the longitudinal center line of the web, a pair of rotatable **sealing** members between whlch.said U shaped web passes, said members being so constructed and arranged as to effect a continuous **seal** between the opposed marginal portions of said web and to also **seal** together transversely extending areas of the opposed portions of said web at spaced points along its longitudinal direction so as to form successive, **sealed**, commodity containing **packages**, means for illlng said **packages** with commodities, an needle-like element for placing a thread-like **opening** member in each of said **packages** mounted adjacent said rotatable **sealing** members for reciprocating movement parallel to the axes of the latter, means for reciprocating said needle-like element in timed relation to the rotation of said **sealing** members, said reciprocating means being so constructed and arranged as to normally place said thread-like member between the opposed portions of said web but to bring the same outwardly beyond the opposed edges of the web at points opposite said transversely **sealed** areas, and means for cutting both said web and said thread-like member along transversely extending lines lying within the conilnes of said transversely **sealed** areas. _ 25. In a **packaging** machine of the type adapted to form commodity containing **packages** out of a iiexible **packaging** material, the combination of means for supporting a supply ‘of said **packaging** material, a walled nlling device for delivering commodities to the **packages** as the latter are formed, means for drawing opposed thicknesses of **packaging** material from said supply around sald nlling device, the avalls ol the latter serving to hold said thicknesses \£`predetermined distance apart to provide ~packa,ges oi predetermined volumetric characteristics, the edges of said opposed thicknesses oi' **packaging** material projecting beyond the walls of said device, said drawing means comprising a pair of rotatable **sealing** members positioned beyond the delivery end of said device between which said opposed tliicknmses of **packaging** material pass and having rolls for continually engaging, and **sealing** together the opposed projecting edge portions oi' said material and sectors of limited peripheral extent for **sealing** together transversely extending areas of said opposed thicknesses of material at spaced points along and of limited Width in the direction of movement of said mlaterial, whereby successive, **sealed**, commodity containing **packages** are formed, and means operative in timed relation to the operation of said **sealing** members for 'periodically delivering commodities from said illling device into said **packages** during the formation thereof. 26. In a **packaging** machine of the type adapted to form commodity containing **packages** out of a rlexible **packaging** material, the combination of means for supporting a supply of said **packaging** material, a walled illling devlce for delivering commodities to the **packages** as the latter are formed, means for drawing opposed thicknesses ol' **packaging** material fromsald supply around said Hlllng device, the walls of the latter serving to hold said-thicknesses a predetermined distance apart to provide **packages** of predetermined volumetric characteristics, the edges of said opposed thicknesses ot **packaging** material projecting beyond the walls of said device, said drawing means comprising a pair of rotatable **sealing** members positioned adjacent the delivery end of said device between which said opposed thicknesses oi’ **packaging** material pass and having rolls for continually engaging and **sealing** together the opposed projecting edge portions of said material and sectors of limited peripheral extent for **sealing** together transversely extending areas of said opposed thicknesses of material at spaced points along and of limited width in the direction of movement of said material, whereby successive, **sealed**. commodity containing **packages** are formed, means operative in timed relation to the operation of said **sealing** members for periodically delivering commodities from said nlling device into said **packages**, and means associated with the delivery end of said device for yieldably urging the opposed thicknesses of **packaging** material apart to facilitate the tllling operation. _ _ 27. In a **packaging** machine of the type adapted to form commodity containing **packages** out of a Ilexlble **packaging** material, the combination of means for supporting a. supply of said **packaging** material, a walled iilling device for delivering commodities to the **packages** as the latter are formed, means for drawing opposed thicknesses of **packaging** material from said supply around said illling device, the walls of the latter serving to hold said thicknesses a predetermined distance apart to provide **packages** of predetermined volumetric characteristics, the edges of said opposed thicknesses of **packaging** material projecting beyond the walls of said device, said drawing means comprising a pair of rotatable **sealing** members positioned adjacent the delivery end of said device between which said opposed thicknesses of **packaging** material pass and having rolls for continually engaging and **sealing** together the opposed projecting edge portions of said material and sectors of limited peripheral extent for **sealing** together transversely extending areas of said opposed thicknesses ot material at spaced points along and of limited width in the direction of movement of said material, whereby successive, **sealed**, cornmodlty containing **packages** are formed, means operative in timed relation to the operation of said **sealing** members for periodically delivering eommodites from said nlling device into said **packages**, and means for associating **package** **opening** means with one of the side edges of the successive **packages** substantially simultaneously with the **sealing** of said edge by said rolls. 28. In a **packaging** machine of the type adapted to»form commodity containing **packages** out of a nexlble **packaging** material, the combination of means for supporting a supply of said **packaging** material, a. walled filling device tor delivering commodities to the **packages** as the latter are formed, means for drawing opposed thicknesses of **packaging** material from said supply around said nlllng device, the walls of the latter serving to hold said thicknesses a predetermined distance apart to provide **packages** of predetermined volumetric characteristics, the edges of said opposed thicknesses of **packaging** material projecting beyond the walls of said device, said drawing means comprising a pair of rotatable **sealing** members _positioned adjacent the delivery end of said device between which said opposed thicknesses of **packaging** material pass and having rolls for continually engaging and **sealing** together the opposed proiecting edge portions of said material and sectors ot limited peripheral extent for **sealing** together transversely extendlng areasof said opposed thicknesses of material at spaced points along and of limited width in the direction of movement of said material, whereby successive, **sealed**, commodity containing **packages** are formed, means operative in timed relation to the operation of said **sealing** members for periodically delivering commodities from said filling device into said **packages**, and means for associating a thread-like **opening** member with each of said **packages** comprising a needle-like element for placing said thread-like member mounted adjacent said rotatable seallng members for reciprocating movement parallel to the axes of the latter, and means for reciprocating said needle-like element in timed relation to the rotation of said **sealing** members, said reciprocating means being so constructed and arranged as to normally place said thread-like member between the opposed thlcknesses of **packaging** material but to bring the same outwardly beyond the edges of said opposed thicknesses at points opposite said transversely **sealed** areas. 29. A method of **packaging** commodities comprising the steps of forming a series of envelopes from a continuous moving supply of flexible **packaging** material by **sealing** together, at It single point ln the path of movement of said material, continuous longitudinally extending and longitudinally spaced transversely extending areas of opposed thicknesses of said material to form the sides and ends. respectively, of consecutive envelopes, maintaining the walls of each envelope, other than the longitudinally extending **sealed** portions thereof, in spaced apart relation independently of the commodity to be **packaged** throughout the interval between formation of the transverse **seals** closing the ends of said envelope, and depositing a commodity in each of said envelopes during formation of the longitudinally extending **sealed** areas thereof. 30. A method of **packaging** commodities in **containers** formed of a ilexible material, comprising the steps of forming the **packaging** material intc an envelope having the walls thereof spaced a predetermined distance apart, continuously seallng the opposed marginal areas of said envelope together while maintaining the remaining opposed areas thereof in spaced apart relation independently of the commodity to be **packaged**, intermittently **sealing** transversely extending areas of the opposed portions of said envelope to one another simultaneously with the **sealing** of the coplanar marginal areas so as to form successive, **sealed**, commodity containing spaces of predetermined volumetric characteristics and uniform width throughout their length, including the transversely **sealed** portions. and filling each of said commodity containing spaces with commodities during and prior to the completion of the **sealing** of the marginal areas of said envelope bounding said space. 31. A method oi’ **packaging** a commodity in a **container** ol’ flexible material comprising the steps of forming a web of the **packaging** material into an envelope with the marginal areas of the web in opposed unsealed relation while continuously moving said web in its longitudinal direction, **sealing** the walls of said envelope together transversely of the web to close one end of the **package**, progressively **sealing** the marginal areas of the web together to close the **package** laterally after formation of said first end **closure** and while maintaining the walls of said envelope in predetermined spaced apart relation independently ol' the commodity being **packaged**, **sealing** together the Walls of the envelope at the opposite end of the **package**, and depositing a commodity within said **package** during and, prior to the completion ot the **sealing** of the marginal areas of said web bounding said **package**. 32. A method of **packaging** commodities comprising the steps ol' forming from a continuous supply ol’ tiexible **packaging** material, **sealing** and, simultaneously with their **sealing**, filling a succession of commodity containing **packages**, embodying in each of said **packages** during its **sealing** a **package** **opening** member in the form of a portion of a continuous thread-like member, and simultaneously severing each of said **packages** and its associated portion of said thread-like member from said continuous supply of **packaging** material and the remainder of said continuous thread-like member. 33. A method of **packaging** commodities in **containers** formed of a flexible material comprising the Steps of bringing two thicknesses of **packaging** material into opposed spaced apart relation, forming a continuous **seal** between the longitudinal edges of said opposed thicknesses, **sealing** together transversely extending areas of said opposed thicknesses at spaced points along and of limited width in the longitudinal direction thereof so as to form successive, **sealed**, commodity containing spaces, depositing a commodity in each of said spaces during the intcwal between formation of

the transverse **seals** bounding said space. and placing a portion of a threadIike member between the opposed thicknesses of **packaging** material bounding each of said spaces just prior to the **sealing** of said boundary. 34. A method of **packaging** commodities in **containers** formed of a liexlble material comprising the steps of bringing two thicknesses of **packaging** material into opposed spaced apart relation, forming a continuous **seal** between the longitudinal edges of said opposed thicknesses **sealing** together transversely extending areas oi said opposed thicknesses at spaced points along and ot limited width in the longitudinal direction thereof so as to form successive, **sealed**, commodity containing spaces, depositing a commodity in each of said spaces during the interval between formation of the transverse **seals** bounding said space. and amxing a thread-like member to one of the longitudinal **sealed** edges of each of said commodity containing spaces substantially simultaneously with the **sealing** of said edge. 35. A method of **packaging** a commodity in a **container** of liexlble material comprising the steps of forming a web ot the **packaging** material into an envelope with the marginal areas of the web in opposed unsealed relation while continuously moving said web in its longitudinal direction, **sealing** the walls of said envelope together transversely ot the web to close one end of the **package**, progressively **sealing** the mar- ginel areas of the web together while maintaining the ,walls of said envelope in predetermined spaced apart relation independently of the commodity belng **packaged**, **sealing** together the walls of the envelope at the opposite end of the **package**, depositing a commodity within said envelope during and prior to the completion of said **sealing** operations, and embedding at least a portionof a **package** **opening** member in the **sealed** area of said envelope. 36. A method of **packaging** a commodity in a **container** of flexible material comprising the steps of effecting a continuous **seal** between the marginal portions of opposed thicknesses of **packaging** material while continuously moving said material in a direction parallel to said marginal Portions, sea-H118 together at intervals transversely extending areas ot said opposed thicknesses to form a series of **sealed** envelopes, illlIng each of said envelopes with commodities prior to the completion ot the **sealing** thereof, and associating a thread-like member with one of the **sealed** edges of each of said **sealed** envelopes by laying a portion of said member 'between said opposed thicknesses of the **packaging** material before the completion of the **sealing** of said envelope. 37. A **packaging** machine of the type adapted to form commodity containing envelopes from flexible **packaging** material, comprising means for effecting a continuous **seal** between the side marginal portions of opposed thicknesses of **packaging** xnaterlal, means for **sealing** together at intervals transversely extending areas of said opposed thicknesses so as to form a series of **sealed** envelopes, means for nil!-118 each or said envelopes with commodities prior to the **sealing** thereof, and means for associating a thread or the like with one of the **sealed** edges of each of said envelopes including means for laying a portion ol' said thread between said opposed thicknesses of **packaging** material before completion of the **sealing** of said envelope



13) Family number: 21044531 (US2269630A)

Title:	TRANSPORTATION BODY
Priority:	US19400325605 19400323

Family:

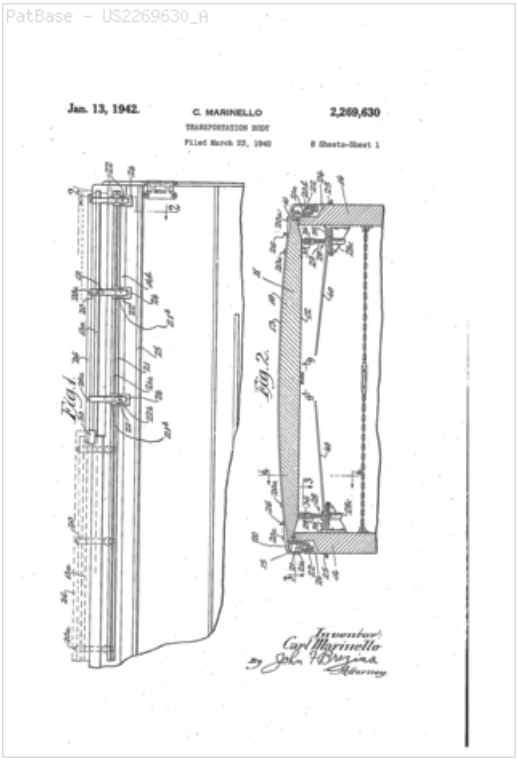
Publication number	Publication date	Application number	Application date
US2269630 A	19420113	US19400325605	19400323

Probable Assignee:	CARL MARINELLO
Assignee(s):(std)**:**	CARL MARINELLO
Inventor(s):(std)**:**	CARL MARINELLO
Inventor(s):	MARINELLO CARL
International class (IPC 8-9):	B61D39/00 (Advanced/Invention); B61D39/00 (Core/Invention)
International class (IPC 1-7):	B61D39/00
CPC:	B61D39/002
European class:	B61D39/00C
US class:	105/377.01 105/463.1 49/221

Classification Explorer

Forward Citations: US4739711, US4028850, US3514902, US2997753, US2761396, US2757043, US2751853, US2674208, US2424728,

Abstract:
Source: US2269630A 1, In at transportation bndv having vertically extending side walls and a stationary roof portion secured to the upper edaes of said side walls and **covering** a portion of said body: a movable roof section for closing and **covering** the remainder nf said body. said movable roof section being adapted to be Hirst moved vertically and then llorizontally to unseel the same: track rails on each side wall of said body and mounted below their upper edges respectively; angular brackets on said movable roof section having downwardly extending portions extendina below said tracks respectively; and rollers rotatably mounted on the doivnivfwdly extending portions of said brackets and adapted to ride on said tracks: each of said tracks havin! spaced apart recesses therein positioned to correspond with said rollers respectively said rollers providing first for rolling movement on said tracks and said track recesses permitting maximum descent of said movable roof section into **sealed** Position upon the upper edgesoi said side walls, said mov- able roof section being adapted to be rolled on said track rails longitudinally of said body and into superposed position to said stationary roof portion.



14) Family number: 21057081 (US2271279A)

Title:	FLEXIBLE **CONTAINER**, **CLOSURE** MEANS THEREFOR, AND MANUFACTURE THEREOF
Priority:	US19400359723 19401004

Family:

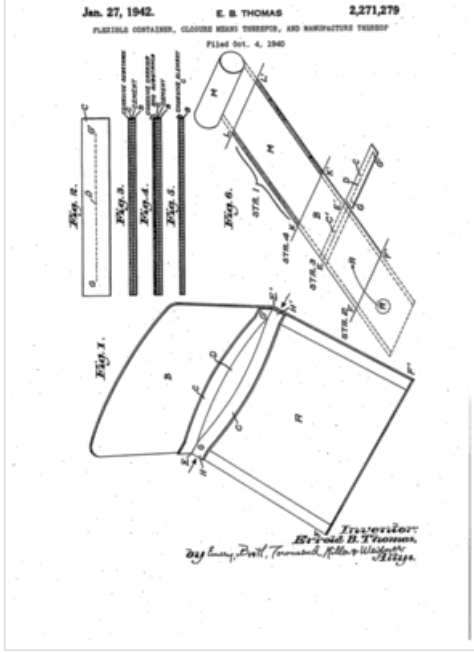
Publication number	Publication date	Application number	Application date
US2271279 A	19420127	US19400359723	19401004

Probable Assignee:	THOMAS ERROLD B
Assignee(s):(std):	THOMAS ERROLD B
Inventor(s):(std):	THOMAS ERROLD B
International class (IPC 8-9):	B65D33/20 (Advanced/Invention); B65D33/18 (Core/Invention)
International class (IPC 1-7):	B65D27/20
CPC:	B65D33/20
European class:	B65D33/20
US class:	206/245 206/260 206/268 229/79 229/80 383/210 383/43 383/86
Classification Explorer	
Forward Citations:	US5499713, US4762230, US4458932, US3510053, US3380576, US3335939, US3272422, US3069978, US2560535, US2514255, US2443484, US2006198560, FR2681581,

Abstract:

Source: US2271279A I claim: ` 1. In a Hexible **container**, in combination, a sheet folded and secured to provide s. **container** body having a fold Hap, a. separately formed strip Hxed at the inner face of the Hap and overlapping an adjacent wall of said body to afford a hinge formation thereat., and a slot in said strip defining the **container** **opening**, said hinge formation being of sumcient rigidity to exert a. permanent shaping iniiuence upon the **container**. 2. In a. flexible **container**, in combination, a sheet folded and secured to provide a **container** body having a. fold Hap, a separately formed strip nxed at. the inner face of the Hap and overlapping an adjacent wall of said body to afford a hinge formation thereat, and a slot in said strip deiining the **container** **opening**, said binge formation being of suiicient resilience to facilitate the **opening** and closing of rhe **container** in response to application and release of slight pressure at the ends of the hinge. 3. In a flexible **container**, in combination, a sheet folded and secured to provide a **container** body having a fold Hap, a separately formed strip nxed at the inner face of the nap and overlapping an adjacent wall of said body to aiiurd a hinge formation thereat, and a slot in said strip defining the **container** **opening**, said strip formed of s. material of a strength adequate in combination with that of the **container** to provide an efiechive tear-resistant structure for the region of said hinge formation. Il() U5 TH Tb , 4. In an envelope-type **container**, in combines tion with the envelope body and its **cover** Hap, a separately formed **sealing** **closure** strip having relatively hinging portions secured respectively fa matching areas oi the Hap and an adjacent wall of the envelope body, a slot formation in said strip for access to the envelope body, and means at the mutually contaactable inner laces of said hinging strip portions for poheslvely interengaging and repeatedly reenga.ging_ them to **seal** and **reseal** the **container**. ` 5. An envelope-type **container** comprising, in bomhination, a sheet inlded and secured to provide an envelope body having a fold flap, a. separately formed **closure** strip fixed. at the inner face of the i1ap_ and overlapping an adjacent wall of said body in the manner of a hinge, and a slot in said strip dennlng the **container** **opening**. 6. As a separate article of manufacture, a, **closure** device for 9. **container** having 9. folding **cover** Hap, said device comprising a strip of Hexible sheet material adapted for adhesive attachment- Hatwise partly on the in-turning face of a. **container** flap gud partly on an adjacent wall of the **container**, said strip hsvins a Iqnsitudinal ’ slot for access to the **container** and being adapted for hinging on the line of or one parallel to the slot, interengageable inner face portions of the strip presenting a cohesive medium for mutually intersealing said portions with capacity for repeated **opening** and **resealing**. ' 'L An envelope-type **container** comprising, in combination, a sheet folded and secured to form an envelope body having H **cover** 11211, H Sepw. rately formed **closure** strip Bxed on the flap RM on the envelope body so as to hinge at the Hap fold une, a slot in said strip deilnlng the coutainer openlng, and cohesive means on the strip whereby its hingedly contacting portions in the closed nap position may be **sealed**, released and **resealed** repeatedly. ` 8. In an envelope-type **container**, in combination, a flexible sheet folded and secl-\r€d to provide n commodity-receiving body having an **opening** at one edge and having a Dr0iectinE **cover** nap adapted for ioldinz 835153 3319 b§J€1Y along a. crease formation adjacent said openmg, and a separately-farmed **closure** strip filled Partly on the inner face of the Hap _and partly org an adyacent wall oi the body and adapwd for hunging in registry with said crease formation, saxd strip having a slot defining the **container** **opening** and having at the opposed faces of its relativgly hinged portions means rendering said. portions separably cohesive in the closed IJU5iti0U nf the Hap thereby to **seal** the **container** with capacity for repeated **opening** and **resealing**, and said strip further cuoperatlng with the Hap and body fa ailord semi-rigidity for the **container** at the region of its. **opening**. 9. The method of making a **resealable** envelope-type **container** which comprises the steps of folding a sheet transversely on itself and securing it laterally to form axrenvelope bodyhaving a projecting nap portion for folding onto said body 'along a selected t.ra.nsverse fold line, providing a **sealing** strip of a length approximately that of the transverse dimension of thé sheet, supplying a cohesive **sealing** and **resealing** medium at one face of said strip, forming a longitudinal slot in the strip, and superposing and mixing said strip partly on said Hap portion and partly on an adjacent wall of the envelope body, in pusition transverse of the laiter and with its 2,271,279 A ` _ . slot In substantial registry with the selected fold line of the flap portion. 10. That method of making a repeatedly selfsealable 'Hap-**closure** envelope-type **container** which comprises the steps of providing a separate **sealing** strip having self-cohesive properties for at least one face, longitudinally slctting the strip, and aillxing it to the inner face of the **container** flap and an adjacent wall of the envelope with its slot in substantial registry with the flap fold line. 11. That method. of making a repeatedly selfsealable flap-**closure** envelope-type **container** which comprises slotting a strip of sheet material to present a **container** mouth' and adhesively securing it ilatwise for folding lh the manner of a hinge at the inner face of the envelope ilap and an adjacent wall of the envelope and rendering said strip seli-adhesive at hingedly contactable areas thereof. 12. In the class ofilap-**closure** **dispensing** envelopes and pouches adapted for repeated **opening** and closing by the user, a semi-rigid transversely hinged flap-**sealing** device of sheet material, said device having cohesively and resealably interengageable inner faces and adapted for adhesive attachment at its respective outer :laces to the under face of an envelope Hap-**closure** and the adjacent Hap-**sealing**' wall, and said device having a mouth-denning **opening** formation paralleliug the flap-**closure** hinge line when the device is so attached. 13. For application under the **closure** nap of envelope and Douch WPG **dispensing** **packages** subject to repeated **opening** and closing by the user. a semi-rigid **closure** strip hinged and slot-' ted longitudinally and having a cohesive- inner surface formation capable of producing and reproducing a **sealing** tension between hingedly contacting areas thereof attendant on relleated **opening** and closing of the **package**, the longitudinal hinge -line of said strip adapted tc coincide `with that of the **closure** flap of the **package** and the longitudinal slot of said element extending a major portion of its length and adapted to align substantially with a free edge of a wall of the **package** to deline the mouth of the latter. - 14. As a new article of manufacture, for use in connection with envelope and pouch type **dispensing** **containers** having a hinged **closure** llap and subject to repeated **opening** and closing by the user, a generally rectangular combined hinge and mouth device of flexible sheet material constructed and arranged for folding lengthwise upon itself to provide hingedly connected portions for attachment flatwise at their outer faces respectively againstthe inner face of the **closure** 'flap of such **container** and against an underlying **opening**-defining wall area of the **container**, said Portions of the device having interengageable inner areas thereof rendered mutually cohesive and capable of **sealing** and **resealing** together repeatedly," and said device having throughout a major extent of its length a slot adapted to present a mouth for access to the **container** **opening** when said device and the **closure** ilap are swung to an **open** position and to be **covered** by and to se`al said **closure** flap in the closed condition of the latter. _

PatBase - US2271279_A



Jan. 27, 1942. E. B. THOMAS 2,271,279

FLEXIBLE CONTAINER, CLOSURE MEANS THEREFOR, AND MANUFACTURE THEREOF

Filed Oct. 4, 1940

Fig. 2. Fig. 3. Fig. 4. Fig. 5. Fig. 6.

Fig. 1.

Inventor: Ervin B. Thomas, by Emery, Booth, Townsend, Miller & Wheeler, Attys.

15) Family number: 21131065 (US2284138A)

Title:	SPACE HEATER
Priority:	US19380232502 19380930

Family:

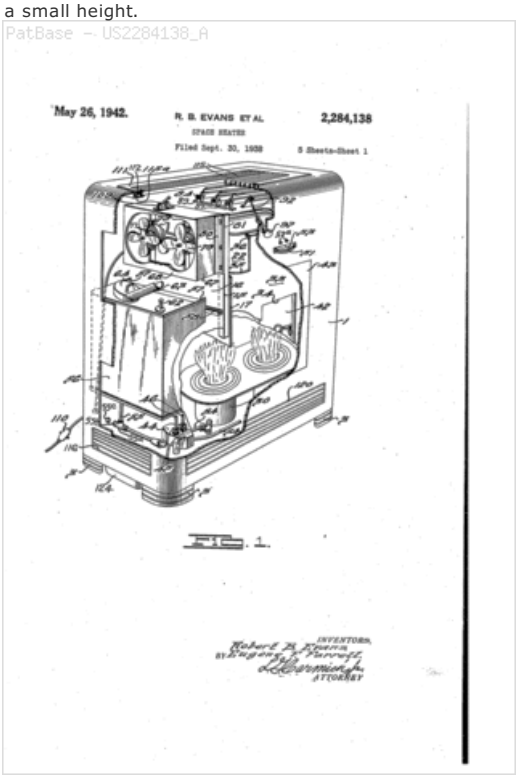
Publication number	Publication date	Application number	Application date
US2284138 A	19420526	US19380232502	19380930

Probable Assignee:	EVANS PROD CO
Assignee(s):(std)**:**	EVANS PROD CO
Assignee(s):	EVANS PRODUCTS CO ; EVANS PRODUCTS COMPANY
Inventor(s):(std)**:**	EVANS ROBERT B ; FARRELL EUGENE F
International class (IPC 8-9):	F24H9/20 (Advanced/Invention); F24H9/20 (Core/Invention)
International class (IPC 1-7):	F24H3/02
CPC:	F24H9/2085
European class:	F24H9/20B3
US class:	126/110B 126/114 126/116A 126/67 126/93 236/49.3

Classification Explorer

Forward Citations:	US7900372, US4474166, US3946801, US3078837, US2681000, US2432143, US2419319, US2011073101, US2009260251, DE1218688,

Abstract:
Source: US2284138A 1. A **unit**, cabinet type, space heater circulating heated air by natural, upward, thermal convection or by downward, blower-induced, contra thermal flow and having an upright combustion **unit**, an upright, **open**-tcp cabinet enclosing and laterally spaced from said upright combustion **unit** to provide an upwardly extending air heating passage having an **open** upper end and a lower **opening**, blower means associated with said passage to induce said downward dow, a grille across the **open** top of the cabinet, and a sul:- stantially horizontal **openable** **closure** **unit** extending across the upper end of said passage above said combustion **unit** and below said grille and comprising a series of interconnected pivoted shutter vanes which, when **open**, permit free upward rise oi said thermal convection flow but occupy a small height.



16) Family number: 21211829 (US2317667A)

Title:	JUNCTION **BOX**
Priority:	US19410423504 19411218

Family:

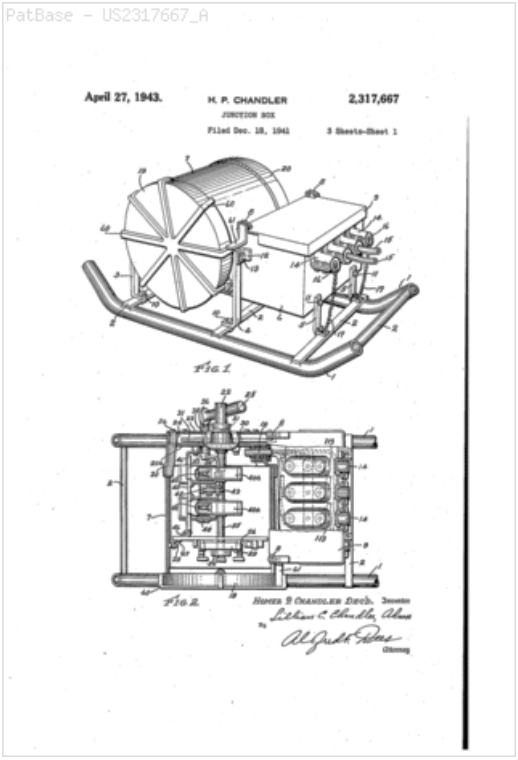
Publication number	Publication date	Application number	Application date
US2317667 A	19430427	US19410423504	19411218

Probable Assignee:	OHIO BRASS CO
Assignee(s):(std):	OHIO BRASS CO
Assignee(s):	THE OHIO BRASS COMPANY
Inventor(s):(std):	CHANDLER LILLIAN C
International class (IPC 8-9):	H01H9/04 H02B1/52 (Advanced/Invention); H01H9/04 H02B1/00 (Core/Invention)
International class (IPC 1-7):	H01H9/04
CPC:	H01H9/045 H02B1/52
European class:	H01H9/04C2 H02B1/52
US class:	200/50.13
Classification Explorer	
Forward Citations:	US8450863, US2492739, US2434576, US2011215591,

Abstract:

Source: US2317667A One method of interlocking **cover** I S with **cover** 'I is to equip **cover** I 9 with a plurality of radial, ribs ED that extend over the edge of the **cover** element and then extend them externally axially of the **cover**, **Cover** 9 is provided with a projecting element or bracket 6| in the position shown When **cover** 9 is closed the projection 5| will lay in between adjacent ribs G0 and in the path of rotation thereof to prevent rotation of the **cover** 19 on the housing 1 and its removal therefrom thereby confining rotation of the **cover** to the space between adjacent ribs. The overall operation of the device comprises first putting switch handle 25 in its **open** posi_ tion ii not already in that position when it is desired to **open** the **covers** 9 and l9. It is now possible to **open** **cover** 9 since bar 32 is' placed in line with slot 31 in bar 33 extension 3361, Since bar 39 is connected to **cover** 9 the latter may be **opened** -= O since bar 30 may slide relatively of har 32 in slot L Sl. VVhen the switch handle 25 is in closed position bar 32 will not be able to enter slot 31 since their axes will not line in the same plane. When **cover** 9 is **opened**, projection 5| will move out of 6.3 the path of rotation of ribs ii Permitting COVGP I9 to be removed from housing T. The **cover** 9 as it is being unscrewed or removed from housing ? will axially move rod 55 through the means of levers 5| and 52 pivotally connected to the **cover** 7 I9 and the rod 55. The continued axial motion of rod 55 will cause bracket 55 mounted thereon to engage or hook above hook 55 on lever 38 to prevent any possible **closure** of the blades 33 of the switch. The reverse of the motion just deO scribed will put the switch in condition for **closure**. An. extra precaution against switch **closure** is provided in that it will be impossible to close the switch as long as **cover** 9 is **open** because bar 32 or its equivalent will hold shaft 36 against rotation. That which is considered new, novel and useful and which is desired to be protected by Letters Patent is as follows: 1. In a distribution device, the combination; an outlet **box** and a tiltable **cover** therefor; a switch housing and a removable **cover** therefor; a switch in said housing and means to **open** and close said switch; means interlocking said tiltable **cover** and switch such that said switch must be **opened** before said tiltable oover may be **opened**; means interlocking said two **covers** such that said tiltable **cover** must be **opened** before said switch housing **cover** may be **opened** and rod means extending axially of said switch housing having means thereon interlocking with means on said switch and with means on said switch housing **cover** such that said switch is held in an **open** position when said **cover** is in an **open** position. 2. In a distribution device, the combination: a switch housing enclosing a switch; handle actuated means to **open** and close said switch; an outlet **box**; a tiltable **cover** therefor; means cunnecting said **cover** and said handle actuated means; means in said handle actuated means adapted for sliding motion relative to said connecting means such that said **cover** may be tilted and said switch held **open** and further adapted to allow said handle actuated means to be rotated to cpen and close said Switch and prevent **opening** of said **cover**, 3. In a power distribution mechanism, the combination; a switch housing; a **cover** remov~ ably secured thereto; a switch in said housing; a rod axially movable in said housing and connectcd to said **cover**; a hook on said rod; means on said switch engageable with said hook; and said **cover** axially moving said rod when being removed from said housing such that said hook may engage said switch means to hold said switch in an **open** position. 4, In a power distribution mechanism. the combination; a switch housing; a **cover** for said housing and a switch therein; an outlet **box**; a **cover** for said **box**; means to actuatc said switch; means interlocking said **box** **cover** and said means such that said switch must be in an **open** position before said **box** **cover** may be **opened**; means interlocking said **box** **cover** and said switch housing **cover**; means interlocking said switch housing **cover** and said switch comprising a rod link connected to said switch housing **cover**. 2. hook on said switch means engageable with a hook on said rod; said switch housing **cover** removable after said outlet **box** **cover** is **opened** and axially shifting said rod to cause said rod and said switch means to engage when said switch housing **cover** is being **opened**. 5. In a distribution mechanism, the combination; an outlet **box** and e **cover** therefor; a switch housing and a **cover** therefor; each of said **covers** adapted to be **opened** and closed; a switch in said housing and mechanism for actuating same; a lever connecting said mechanism and said outlet **box** **cover**; means on said mechanism engaging a slot in said lever when said switch is **open** permitting said **cover** to be **opened** and having an aperture connected with said slot in which said mechanism rotates when said switch is **opened** and closed; means interlocking said t-wo 4 2,a17,ea1. such that said switch housing **cover** canopenecl until said outlet **cover** is **open** and interlocking said mechanism and said housing **cover** such that said switch is in an **open** position when said switch housing **cover** is **open**. » 6. In a' power distribution mechanism; an outlet **box**; an **openable** **cover** therefor; a switch housing; an **openable** **cover** therefor; a switch in said housing; mechanism to **open** and close said switch; means interlocking' said outlet **box** **cover** and said mechanism which includes a bar connected to said **cover** at its one end and having its other end, a key means on registrable with said slot when its **open** position to permit said to be **opened**; means interlockcovers not be means switch locked an axial slot in said mechanism said switch is in outlet **box** **cover** lllg said **cover** such that said switch housing **cover** may not **open** until said outlet **box** **cover** is **open**; and means interlocking said switch housing **cover** and said switch to lock said switch in **open** position when said switch housing **cover** is **open**, which includes a rod means axially slidable in said housing, a linkage pivoted to said **cover** and connectible to said rod, a hook on said switch, a hook on said rod engageable with said hook on said switch. said **cover** axially moving said rod when **opening**, thereby causing said hooks to engage locking said switch in its **open** position. » » 7. In a power distribution device, the cornbination; an outlet **box**; a **cover** for said **box**; a cylindrical switch housing; an axially movable **cover** for said housing; said **box** and housing being connected together; a switch in said housing; lug and bracket means arranged exteriorly of said **covers** interlocking said **covers** such that said switch housing **cover** may not be **opened** until after said outlet **cover** has been **opened**; and means interlocking said **box** **cover** and said switch such that said switch must be **open** before said **box** **cover** may be **opened**; said interlocking means preventing **closure** of said switch while said **cover** is **open**. 8. In a power distribution system, the combination; a cylindrical switch housing and an outlet **box** operatively associated; an axially movable **cover** for said outlet **box**; a **cover** for said switch housing; a switch in said switch housing; lug and bracket means interlocking said **covers** SXteriorly thereof such that the housing **cover** may not be **opened** until said **box** **cover** has been **opened** including a bracket on said outlet **box** **cover** and radial disposed extensions on said switch housing; and means interlocking said housing **cover** and said switch such that said switch will be locked in its **open** position while said housing **cover** is **open**. 9. In a power distributing system, an outlet **box** and a cylindrical switch housing operatively associated; a tiltable **cover** for said outlet **box**. threadably secured thereto; an axially movable **cover** for said switch housing **box**; said c0V€I'S being **openable**; a switch in said housing; slot and pin means interlocking said switch and said tiltable outlet **cover** such that it may H017 be **opened** until said switch is **open**; hook means on rod means interlocking said cylindrical housing **cover** and said switch such that said switch is lggked in **open** position while said **cover** is being removed: and said cylindrical **box** **cover** interlock adapted to lock said switch in **open** position while Said switch is ODEII- _ 10_'111 a portable distribution device; a. pair of skids; a rectangular housing, for a plurality of power outlets; a cylindrical housing for a switch and fuse mechanism; means to support said housings on said skids; means to join said housings together; a switch operating mechanism; a tiltable **cover** for said outlet **box**; an axially movable **cover** for said switch and fuse

box; means to interlock said covers; means to interlock said covers with said switch mechanism; and said switch and fuse housing being so disposed on said skids as to permit an axial removal of its cover. Il. In a portable explosion-proof switching and distributing device; an outlet box; a tiltable cover for said box; a cylindrical switch box secured thereto; a closure threadably associated therewith; a switch in said switch box; handle actuated means to open and close said switch; a slotted bar connectible between said tiltable cover and said means; a rod mounted in said switch box and relatively axially movable therein; means on said rod engageable with said switch; a linkage connecting said threaded cover and said rod such that when said cover is removed from said switch box said switch will be locked in open position; said slotted bar having a circular opening connected to said slot; means on said handle actuated means engageable with said slot to allow tilting of said cover and engageable in said opening to allow actuation of said switch; a bracket on said tiltable cover movable into the path ct motion of means on said threaded cover to interlock said covers and to prevent opening of said switch housing until said outlet cover and said switch has been opened. 12. In a portable explosion-proof switch housing; a cylindrical housing; a cover threadably secured to one end; a switch in said housing; means to open and close said switch rotatably disposed in the other end of said housing; a rod axially movable in said housing; linkage means connecting said cover with said rod; means on said rod engageable with means on said switch, said rod means engaging said switch when said rod is moved axially by said cover to hold said switch in its open position. 13. In an explosion-proof switch housing and distribution system; an outlet box and a cylindrical switch housing operatively associated; a pivoted cover on said box; a. cover for said housing threaded thereto; means on each of said covers interlocking same; a switch in said housing; means in said housing to open and close said switch; a handle to rotate said means; a. bar having a slot therein connecting said pivoted cover and said means, said slot enlarged at its one end; means on said bar slidable in said slot when said pivoted cover is opened and rotatable in said enlarged portion when said switch is opened and closed; a rod slidable in said housing; a linkage connecting said threaded cover and said bar; and means on said bar engageable with said switch; said slotted bar and said rod interlocking said switch with each of said covers. 14. In s. switch and outlet box, the combination; en outlet box and a switch housing operatively associated; a pivoted cover for said outlet box; an axially removable closLu'e for said housills; means externally arranged on each of said covers interlocking them; a switch in said housing; means including a handle to open and close said switch; a bar connected to said cover having e. longitudinally disposed slot therein connecting with an aperture at one end thereof; a pin on said means slidable in said slot and rotatable in said aperture; said pin slidable in said slot when said cover is to be opened and pre- venting opening of said switch and rotatable in said aperture when said switch is actuated and preventing opening of said cover; an axiallydisposed rod in said housing; a linkage connecting said rod and closure; means on said rod adapted to engage said switch when said cover is being axially removed thereby sliding said rod in said housing, said means locking said switch in open position while said closure is removed from said housing; and said closure and cover interlock being nrst disengaged before said slot and pin and said rod and switch interlocks become selectively operative. 15. In an outlet box and switch housing, the combination; an outlet box; a pivoted cover for said box; a switch housing associated with said box; a switch actuating shaft in said housing; a handle on said shaft; a bar connected to said cover having a connected aperture and a slot therein; a Din on said shaft and slidable in said slot to permit opening of said cover and rotatable in said aperture to permit rotation of said shaft and to simultaneously prevent opening of said cover



17) Family number: 21470869 (US2324541A)

Title:	FOLD-CLOSED **PACKAGE**
Priority:	US19400358377 19400926

Family:

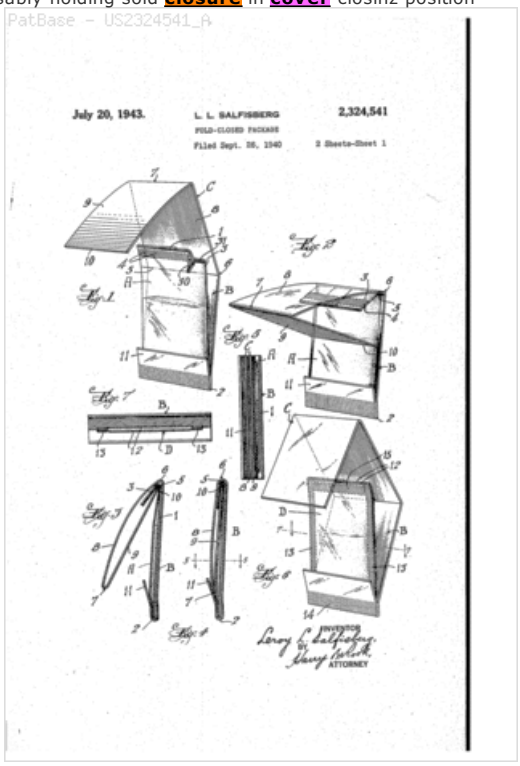
Publication number	Publication date	Application number	Application date
US2324541 A	19430720	US19400358377	19400926

Probable Assignee:	IVERS LEE CO
Assignee(s):(std):	IVERS LEE CO
Assignee(s):	IVERS LEE COMPANY
Inventor(s):(std):	SALFISBERG LEROY L
International class (IPC 8-9):	B65D75/38 B65D75/58 (Advanced/Invention); B65D75/38 B65D75/52 (Core/Invention)
International class (IPC 1-7):	B65D85/56
CPC:	B65D75/38 B65D75/5816 B65D2575/586
European class:	B65D75/38 B65D75/58D L65D575/58R
US class:	206/474 206/525.1
Classification Explorer	
Forward Citations:	US3162539, US2833400, US2558856, US2008299338,

Abstract:

Source: US2324541A Having thus described my invention, what I claim is: , 1. A **package** comprising a. bu opmnble It one end and closable by a transverse fold in the bog. a **cover** consisting of a strip of materiel secured to the **bag** at the side of said fold opposite sold **open** end and foldable transversely of itself to extend around the **bag** lengthwise oi the litter, said **cover** having a. **closure** dup foldable over said transverse !old of the **bag** and provided with a portion to separably enter said transverse fold and hold the fold between said portion of the flap and one fold of said **cover** as the **cover** is folded around the **bag**, and means for releasably holding said **closure** nap with said portion thereof in said transverse fold of the **bag** as described. 2. A **package** comprising n **bag** having a neck at one end formed with an **opening** closable by a fold transversely of the neck, a **cover** secured to the other end of the **bag** and foldsble around the **bag**, said **cover** having a **closure** flap to sepsrately enter said fold in the neck of the **bag** and hold said fold against unfolding as the **cover** is folded around the **bag**. and means for releasably holding said nap in **cover**-closing position. 3. A **package** comprising a **bag** having an **opening** at one end closable by a transverse fold in the **bag** inwardly of said **opening**, a. **cover** consisting of a strip of material folded around and secured to the other end of the **bag** with a transverse marginal portlon in spaced juxtaposed relation to said **bag**, the **cover** strip being foldable around the first-mentioned end of the **bag** and having a **closure** flap provided with a portion to separably enter said fold of the **bag** as the **cover** is folded around the tlrst-mentioned end of the **bag**, said **closure** nap being lnsertlble between said transverse marginal portion of the **cover** and said **bag** to hold the flap in **cover**-closing position. 4. A **package** comprising a **bag** having an **opening** at one end closable by a transverse fold in the **bag** inwardly of said **opening**, a **cover** consisting of a body portion at one side of said beg folded at one end around and secured to the other end of the has with a transverse marginal portion in spaced juxtaposed relation to said **bag**, the other end of said body portion having a. flap hingedly connected thereto to extend around the nrst-mentioned end and overlie the other side of the **bag**, said nap comprising two hingedly gon, nected sections one end of one of which is connected to said body portion while the free end of the' other section is adapted to separably enter said transverse fold of the **bag** as the **cover** is closed around the **bag**, the portions of said nap adjacent the hinged connection of said sections being insertible between said transverse marginal portion of the **cover** and said **bag** to hold the nap in **cover**-closing position. ' 5. A **package** comprising a. **bag** having an **opening** at one end closable by a transverse fold in the **bag** inwardly of said **opening**, a **cover** consisting of s, single strip of material secured ad~ jacent one end to the other end of said **bag**, said **cover** strip extending along one side of the **bag** and being folded at the nrst mentioned end of the **bag** to form a **closure** flap having two sections connected by a fold, said sections ot the nap being adapted to be disposed in side-by-side relation and extend along the other side of the **bag** with the free edge of the endmost flap section separably disposed within said transverse fold of the **bag** as the **cover** is folded around said **bag**, and means for releasably holding said **closure** flap in **cover**-closing position. 6. The **package** set forth in claim 5 wherein the last named means comprises B transverse , 9,824,541` A 4 3 marginal portion on the nrst-mentioned end of said **cover** strlpln spaced .luttavolld relation to the l_gt;ag,'between which and the **bag** the told between said nap sections ls insertlble. 'LA **package** comprising a **bag** having an opensble endrand a. transverse fold to' permit closing andopenlng of sald end. and ~a **cover** comprisingss a llzlp of a Wausverse fold sdlscent one end around and secured totlmeotbersndofsaldbamslldstrlphavlnga toldalsoatthennt-menttonodendotthebalto nicely receive said transverse told of the bu and toformanlntegralclosuretllapwhlchhasa transverse :told forming two sections one of which ls at the corresponding end of the strlp andls adapted to be arranged beneath and ln side-byside relation to the other section with its tree end edge separably disposed in said transverse fold ot the **bag** to hold said fold betweensaid edge and the second-mentioned told of said **cover** strip, and means for releasably holding skid **closure** nap with said edge thereof in said transverse fold of the **bag** as described. _8. A **package** comprising a **bag** having an 09611 end and a transverse told to permit closing and **opening** ot sald end,'and a **cover** coxnprlslng a strip of material having a transverse fold adjacent one end around and secured to the other end of said **bag**, said strlp having a fold also at the tlrst-mentioned end of the **bag** to nicely receive said transverse fold of the **bag** and To form an integral **closure** flap which has a transverse fold forming two sections one of which ls at the corresponding end of the strip and ls adapted to be arranged beneath and in side-by-side relation to the other section with its free end edge separably disposed in said transverse told of the **bag** to hold said fold between said edge and the second-mentioned fold of said COVCI' strip, and means to releasably engage the transverse :fold of said **closure** flap for releasably holding said **closure** nap with said edge thereof ln said transverse Iold oi' the **bag** as described. `, V 9. The **package** set forth lrrclalm 7 wherein said means for releasably holding the **closure** flap comprises a. marginal end portion of said **cover** strip extending beyond the ilrst-mentioned fold of the **cover** strip ln spaced relation to the **bag** to receive between itself and sald **bag** the' fold that connects said sections of the **closure** HEP- ' ss ~ A V 10. A **package** comprising a **bag** having a transverse fold, a **cover** consisting of a single strip ofmaterlal secured tq the **bag** and extending along one side thereof and belng folded to form a. **closure** flap having two sections connected by a told, said sections of the flap being adapted to be disposed in aide-by-side relation and extend along the other side of the **bag** `with\ the free edge of thewendmost flap section separably disposed within said transverse fold of the **bag** as the **cover** is folded around said **bag**, and means for releasably holding said **closure** nap ln coverclosln g position. 11. .A **package** comprising a **bag** initially closed at one end and having a tearing Hap for removing said closed end to form a. discharge **opening**, said **bag** having a transverse fold inwardly of said closed end to close said- **opening** after removal of the tearing flap, and a **cover** secured to the **bag** and foldable therearound, said **cover** having a **closure** flap to separably enter said transverse fold and hold the fold against unfoldlng when the **cover** ls-folded around the **bag**, and means for releasably holding said **closure** nap in **cover**-closing position. , , _ ,_12. A **package** comprising a **bag** having a dlscharge neck at one end and initially closed, and a tearing nap to be torn on across said neck to form a discharge **opening**, sald **bag** having a transverse fold lnwardlyof said tearing tlsp to close said **opening** after removal ol said tearing nap, and a **cover** secured to the **bag** and foldable theresround. said **cover** having a _closure nap to separtbly enter said transverse fold and hold the told against unfolding when the **cover** ls -folded around the **bag**, and means for releasably holding said **closure** Hap ln **cover**-closing posltlon. 13. A **package** comprising a **bag** and a **cover** comprising a strip of materlsl having a nrst fold ad,1acent one end around and secured to one end of said **bag**, sald strip having a second told extending around and receiving the other end ol the **bag** to form an integral **closure** flap for overlying the other side ol the **bag**, said **closure** nap having a transverse fold forming two sections one of which is at the correSPOnding end of the strip and is adapted to be arranged beneath and in side-by-side relation to the other section ln contact with the **bag** and with its free end edge disposed adjacent sald second fold, the marginal end portion of said **cover** strip extending beyond the flrst-mentioned fold of the **cover** strip in spaced relation to the **bag**, and the fold that connects said sections of the **closure** ilap being lnsertlble between said marginal end portion and said **bag** for releasably holding said '**closure** tlap in ,overlying relation to the second-mentioned side of the **bag**. 14. A **package** comprising a **bag** initially closed at one end and having a tearing nap for removing said closed end to form a discharge **opening**, said **bag**

having a transverse fold inwardly of said closed end to close said opening alter removal of the tearing Hap, and a cover com- - prlslng a strlp of_ material having a transverse fold adjacent one end around andsecured to the other end of said bag, -said strip havlng a fold also at the flrst-mentioned end of the bog to nicely receive said transverse fold»of the bag and to funn an integral closure flap which has a transverse fold forming two sections one ot which is at the corresponding end of the strip and is adapted to be arranged beneath and ln side-by-side relation to the other section with its free end edge separably disposed in said transverse fold of the bag to hold said fold between said edge and the second-mentioned fold of said cover strip, and means for releasably holding said closure flap with said edge ,thereof in said transverse fold of the bag as described. 15. In a package, a bag comprising opposed layers of deiglhle material forming between them a receptacle, said layers being sealed together at one end of the bag for closing said compartment, said bag having a tearing flap to open said closed end for producing a discharge opening for said _receptacle when said flap is torn, said Bag having a transverse fold inwardly of said tearing nap to close said discharge opening alter removal of the tearing nap, and a cover comprising' a strip of material having a transverse fold adiacent one end around andsecured to the other end of said bag, said strip having a fold also at the flrstlhBBl5l.0DBd end of the bag to nicely receive said transverse fold of the bag and to :form an integral closure nap which has a transverse (old forming two sections one of which ls at the corresponding end of the strip and ls adapted to be 4 , , _ '_ '9,384,541 arranged beneath and in side-by-side relation to the other section- with its free end edge seperably disposed in said transverse fold of the hog to hold said told between sold edge and the second-mentioned fold of said cover strip, and means fpr releasably holding the closure flap comprising a marginal end portion of sald cover strip extending beyond the flrst-mentioned fold of the cover strip in spaced relation to the bag to receive between itself and said bag the fold thahconnects said sections of the closure Hap. 16. A package comprising 9. bag openable at one end and having a. transverse fold inwardly of said end to close the opening, and a cover comprlslnz a strip hoving l body portlon at one side of the bl: and a tronsverse fold adjacent one end around uxd.sec'ured to the other d oi the bog, sold strip hnvlng I fold nlso It the hrltmentloned end of the has to nicely receive sold transverse fold ot the bu md to form one sectlonvof s closure to overlle the other llde ol the bag, sold closure Including.; second section in the form of A nap on said strip to sepanbly enter said transverse fold of the ba: snd hold the told against unfolding when the cover is folded around the bag, and means for releasably holding sold closure in cover-closinz position



18) Family number: 22472477 (US2361408A)

Title:	**CONTAINER** AND METHOD OF MANUFACTURE
Priority:	US19430477820 19430303

Family:

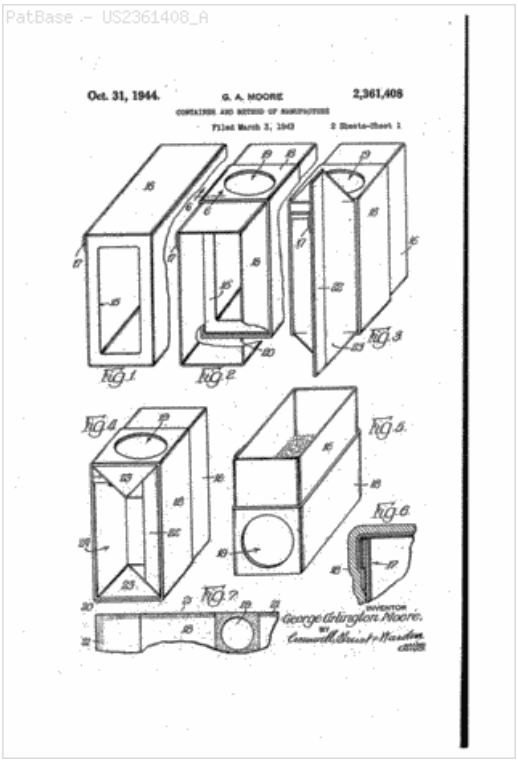
Publication number	Publication date	Application number	Application date
US2361408 A	19441031	US19430477820	19430303

Probable Assignee:	ARLINGTON MOORE GEORGE
Assignee(s):(std):	ARLINGTON MOORE GEORGE
Inventor(s):(std):	ARLINGTON MOORE GEORGE
Inventor(s):	MOORE GEORGE ARLINGTON
International class (IPC 8-9):	B65D5/60 B65D5/62 B65D5/64 (Advanced/Invention); B65D5/42 B65D5/56 B65D5/64 (Core/Invention)
International class (IPC 1-7):	B65D3/10 B65D5/56 B65D5/70
CPC:	B65D5/603 B65D5/62 B65D5/64
European class:	B65D5/60B B65D5/62 B65D5/64
US class:	229/121 229/122 229/122.23 229/122.24 229/125.15 229/125.17 229/204 229/5.81 383/119 53/449 53/456 53/482 53/489

Classification Explorer

Forward Citations: US4413464, US4219149, US4169540, US3944127, US3768719, US3269635, US3228573,

Abstract:
Source: US2361408A 1, A **container** for food products or the like of the class described, comprising a blank of thermoplastic material folded into tubular body formation having marginal portions forming a thermally **sealed** longitudinal seam and providing **openings** for filling a commodity through the sides of said body formation, thermally **sealed** vertical FB body **closure** seams at the ends of said tube to confine a commodity placed within said body formation through said **openings**, said vertical seams being folded to form side walls, a reinforcing blank overlying the top, remaining side walls and bottom of said tubular body formation and being **sealed** in said position in **container** formation, and a second protective blank transversely disposed to said reinforcing blank and surrounding the side walls of said **container** formation around said vertical side wall seams and being secured in that position, one of said reinforcing blanks having a commodity **dispensing** **opening** carrying a snugly fitting replaceable **cover**.



19) Family number: 21599894 (US2369013A)

Title:	**CONTAINER** AND METHOD OF MAKING THE SAME
Priority:	US19420456446 19420826

Family:

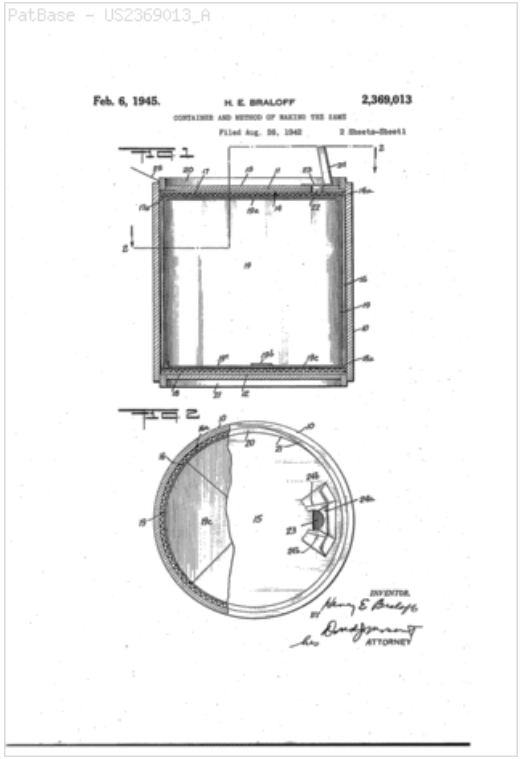
Publication number	Publication date	Application number	Application date
US2369013 A	19450206	US19420456446	19420826

Probable Assignee:	BRALOFF HENRY E
Assignee(s):(std):	BRALOFF HENRY E
Inventor(s):(std):	BRALOFF HENRY E
International class (IPC 8-9):	B65D3/22 (Advanced/Invention); B65D3/00 (Core/Invention)
International class (IPC 1-7):	B31B7/60
CPC:	B65D3/22
European class:	B65D3/22
US class:	229/117.28 229/125.04 229/125.14 493/93
Classification Explorer	
Forward Citations:	US4735308, US4089255, US4007670, US3848696, US2646200, US2522058,

Abstract:

Source: US2369013A I claim: ' 1. A **container** comprising an outer casing including a tubular shell and end-forming members entered in said shell in frictional engagement therewith, an inner product-receiving receptacle of nexible material resilient means adherinely surrounding; said inner receptacle to form an external wall therefor, said wall frictionally engaging the inner wall of the shell to support the inner receptacle therein between said end-forming rnembers, and separate resilient means interposed between the inner surfaces of the respective end-forming members of the outer casing and the contiguous parts of said-receptacle in engagement with the resilient means surrounding said receptacle. 2. A **container** comprising an outer casing, including a tubular shell and end-forming members adapted to be separately entered in the opposite ends of said shell in **sealing** engagement therewith, a receptacle of llexible material embodying_a closed bottom supported internally of said shell, with the bottom thereof in superposed relation to one of said end-forming members entered in said shell, a part of said receptacle being adapted to be manipulated into a **closure** by folding it upon itself in a plane substantially parallel to that of the adjacent end-forming member, when such member is entered in the shell in juxtaposition to the fold-formed **closure**, and resilient means adheringly surrounding said receptacle to form an external wall therefor, said Wall frictionally engaging the inner surface of the shell to suspend the receptacle therein. and being capable of reacting to shifting internal pressures within the receptacle, when loaded, to protectively cushion the receptacle wall against rupture. 3. A **container** comprising an outer casing of fibrous material, including a tubular shell and end-forming members adapted to be successively entered in the opposite ends of said shell, in frictional **sealing** engagement therewith, a baglike receptacle insertable Within said shell with its bottom in superposed relation tor one end of' said shell, said receptacle having an external wall of resilient material frictionally engageable with the inner wall of said shell, in the expansion of said receptacle within said shell, to locate said external wall of the receptacle in conforming frictional engagement with theshell wall, a liner of resilient material interposed between the bottom of said receptacle and an end-forming member entered in the adjacent end of said shell, said receptacle, when loaded, being adapted to be folded upon _itself to **seal** the **open** end thereof inwardly of the contiguous end of the shell, and a liner of resilient material superimposed upon the fold-formed **closure** of said receptacle, the remaining end-forming member being frictionally entered in the end of the shell i.n superimposed relation to said latter liner and in engagement therewith, to complete the **container**. 4. A **container** comprising an outer casing of fibrous material, including a tubular shell and end-forming members adapted to be successively ,2;3B950,1S -5 »entered'in` the .opposite :ends of said shell; in frice tional **sealing**-engagement therewith, =a **bag**=1ike receptacle insertable -within said shell with its bottom in superposed relation'to one»end of said shell, said receptacle having -an external 'wall of resilient 'material frictionally:engagea.ble -with the »in.nei' wall ofsaid shell, ,-in theexpansionfof said receptacle within said shell, to 1oce.te»said external wall of the-receptacle inconforming frictional engagement with the shell ~Wal1,=a:li.ner of resilient material interposed. between the bottom of said receptacle and=a.n:end+forming meniher entered in the _adjacent 'end of said shell, said receptacle, when loaded, being adapted to be folded upon itself ~to .**seal** ssthe **open** erid 'thereof inwardly of-the contiguousuend ofi the shell, and a liner of resilient =material -superimposed upon the fold-formed closurepf-said ~receptac1e,-the remaining end-forming member being frictionally entered in the end .of the shell in 'superimposed -relation to said lattexolinérfand in -engagement therewith, to-complete the conta,i.ne1~; the nrst applied end-forming memberbeing adapted tofunction as the top of they **container** in response to the inversion of the **container** -whenssloai:led,~and means .embodied in -such ' latter end-forming member for optionally. discharging the contents of 'the **container** from the receptacle, Without 'separating the end-forinii-ig member -from the shell. ' ' .5. A **container** :comprising an outeiorigid casing .and an inner ilexible receptacle, 'conformable within the casing to the contour of -the inner wvall thereof and foldableiupon itself- for **packaging** the goods Within the casingfthe receptacle 'comprising a flexible **bag**-'liké member-and -9. sheet of resilient -.material -**united** -to the -oiiter surface ofxsaid **bag**-like member 'to form a resilient outer wall therefor, saidiouterwallreacting to pressure applied internally -of the=-receptacle -to frictionally -adhere to theinner ~wall of the casing, in conforming engagement therewith, to maintain the stability of the -'**package** within the casing 'under shifting `1oad=conditions. , .6. A **container** comprising an 'outer-rigid casing, including a .tubular shell =anelf end-forming ,members :adapted Lto-be successively entered in the oppositeends of saidlshell -In frictional **sealing** engagement therewith, each of -said' endforming members being composed-of 9. pair of concentric discs._of unlike -diameter, -**united** in superposed-relation to' impart to the 'end-fqrming -member pressure diaphragm characteristics, a retaining ring for maintaining each of' said end-forming members ~in»~sealing_»position, in association with said shell, »a **bag**-like receptacle insertable Within said shell withss its bottom 'in superposed relation to oneend of said shell, Said receptacleihaving an~external ~wall of resilient material frictionally ~ engageable with the ssinner ;Wall of. said shell, in the expansioniof sa,id-receptacle ,within said shell; to locate said external -wall of the #receptacle -in conformlnggfrictional engagement with the shell -wall; et liner of~resilient material interpgsedgbetween the bottom of said-receptacle andan- end-forming member entered in the adjacent end of said shell, said receptacle, when loaded, being adapted to be folded upon itself to **seal** the **open** end thereof inwardly of the contiguous end of the shell. and a liner of resilient material superimposed upon the foldformed **closure** of said receptacle, the remaining end-forming member being frictionally entered in the end of the shell in superimposed relation :to said latter liner and In engagementztnerewith, to complete the **container**. ' , 7. .A cqntainer:comp1'isin§ .ifn-But!!! casing iDcluding a -tubular shell .and tend-forming meme bers successively entered-in;said_\shel1, in -fric- 'tional engagement therewith, tocomplete the for- -mation-of said casillgpainexible, receptacle having a closed bottomiand embodying- an_ external wall of _lt;resi1ient~materia,l, said receptacle being entered -in,said»shell in a.-collapsed, condition -,and ex- =ps|.nded by»-internally _applied 'pressure for -conf-formation to- the, contour, of- the' wall -of-the shell, theexternal wall of the »recepta.cIe engaging the ,mall -cfgthe-shell _in1 frictional adherence therewith to support the receptacle-Within the ishell with its bottom in predetermined.-spaced relation to one, _end ,ofthe shell, the-**open**-end ofthe receptacle extending irvthe direction of the oppof _site end. of the shell, -the end _surface of 'the -external=wall of;-saidreceptacle contiguous to the bottom of 'ther receptacleforming a.sh\1u.lder internally of the _shell tofdeine, the inward location offan end-fo1Tmi!1g'n1ember»,when entered inthe shell -to support thereceptacle underload therein. i 33. ._A -**container** comprising .an.outer.casing in- ,cluding 3. tubular gshell tend end-for-ming members-_adapted to 'be 'successively entered in said' shell, in frictiQnal;engagement_lt;therewith, to com.- pletevthe formation Qi said ea.sing,'a iexible reqeptaclehaving ;a closed bottom; and .embodying ,gn external _Wall .of resilient rnaterial adapted- :to _be entered _inmsaid ,shell ,in ,a, collapsed condition .9L;1d;eXp§il1ded;by ,internally applied DI'€SS`Ll1'S,f0l` co,nfqrjnjiatiQn;to_ the G5Jl'1to1.1r;of the-wall-of the shell, _the _external wall of the .receptacle.enga,gthe~wa;ll_of the shell in-5-frictional ,adherence ,therewith to1sj1ppo1't the receptacle .within .the shell with its bottom in predetermined spaced relation ;to_o;;e-end _of the she11,~the.opei'i end of the receptacle extending in the fvdirectionf of .the ,opposite \e_;1d;Q_f _the shell, whereby 'the end .»S1l1f- [ace of- the external Wall ofsaid receptacleoontiguous to; the _bottom ,of 'the _receptacle will .form ,a shoulder internally-of`;the_sheIl todeflne the inward location ,ofr an ,end-forming member .when entered ;in the;shel1-_to support the

¢rece_ptacle un- ,der load _therelnp and _a_ resilient element ,inter- _vposable 'betWeen_the_~bottoni _of, the receptacle and the juxtaposed _end-form.ing~member of a circumferential ,area ,corresponding to-,the inner, circumferential Earearoi' the shel1,_,for..engagernent :by the bQtlJQH1_Df;§§.id receptacleand the opposed SV-!1'f2»0€ Of .$8;i_lt;i ,¢I!d¢f0rl11i1Jg member, =and the .end-cleiinine §l11'fQCe,pf 1;1;e.resi1ient.externa1~wa11 of Said r¢0eDta_G1e_~surrQLmding the bottom of said receptacle. ` .9. A **container** cornprigingan-outer -casing, .in- ,cluding a tub_ular_ shell ,and end-forming 'memhersvgadapted to be successively.-entered in said Shell, in frictional engagement-_therewith, to complete the fo1'mation-,ofgsaidcasing, adiexibléi re- 'C§Pt3»Cl€f haying, _B,,_C1QSQC1'{bOtfOI'fl and .embodying an external wall; ot_;_resilient,material adapted'-to _be entered innsaid;-slj1Ql3in;a collapsed-condition andgexpandedjy, internally applied ~ pressurecfoi' cortforrnatiglyfto;tljie_;contourof tl:1e_W,all .of thE shell. the exte1;nal~y7all,_of_ the receptacleengaging the Wall of the shell in frictional adherence therewith to support the receptacle Within the shell with its-bottom in predetermined spaced relation to one end of the shell, the **open** end of the receptacle extending in the direction gf the opposite end of the shell, whereby the end surface of the external wall of said receptacle contiguous to the bottom of the receptacle will form a shoulder internally of the shell to define the inward location of an endéforming member when entered in the shell to support the receptacle under load therein, a resilient end element interposable between the bottom of the receptacle and the juxtaposed end-forming member coextensivess in circumferential area with the inner surface of said member, for engagement with the bottom of said receptacle and the opposed surface of said end-forming member and the end-deining sur- .Qace of the resilient external wall surrounding the bottom of the receptacle, the **open** end of said receptacle being foldable upon itself to form a **closure** in proximity to the opposite end of the shell, a resilient end element corresponding to the first resilient end element being disposed upon the fold-formed **closure** of said receptacle, the remaining end-forming member being frictionally entered in said shell in engagement with said second resilient end element to press said latter end element into deformable contact with the opposed internal shoulder-forming edge of the resilient external Wall of said receptacle. ` 10. The method of producing an inner receptacle for a. **container** having a rigid outer protective casing, which consists in forming a. **bag** with a closedbottom of paper, supporting the **bag** in distended condition and cementing to the outer surface of the beg in surrounding engagement therewith, a sheet of corrugated paper board with the opposite ends of the corrugated board, that are disposed longitudinally of the **bag**, mated in a butt jointure, one of the transverse edges of the corrugated paper board surrounding the bottom of the **bag** with the other parallel transverse edge of the corrugated paper board spaced inwardly of the edge of the mouth of the **bag**. 11. The method of producing an inner recentacle for insertion in a rigid outer casing of a **container**, which consists in forming a paper **bag** with a **sealed** bottom-forming end, supporting the **bag** in distended condition, cutting a sheet of corrugated paper board to provide parallel end edges and parallel side edges for such sheet, cenfienting the corrugated sheet tothe outer surface of the paperbag throughout its area, with the end 'edges of the sheet mated in a butt jointure upon said **bag** wall, one side edge of the sheet surrounding the bottom of the **bag**, the other side edge of the sheet surrounding the wall of the **bag** in vertically spaced relation to the bottom thereof and below the mouth of the **bag**. 12. A method of producing a **container** having a rigid outer casing comprising a tubular shell with end members entered therein to **seal** the same, and an inner receptacle for the contained product supported within the casing, which comprises-the steps of forming apaper **bag** with a **sealed** bottom-forming end, supporting the **bag** in distended condition, adhesively **uniting** to the outer surface of the **bag** a sheet of corrugated paper board to form an external wall for the **bag** extending from the bottom-forming end of the **bag** to a point on the wall thereof below the mouth, collapsing the **bag** and entering the same into the shell of the **container**, dilating the **bag** when entered in the shell to conform tothe contour of the shell and to cause the corrugated external wall of the'**bag** to frictionally adhere to the opposed wall surface of the shell to support the expanded **bag** withinthe shell for relative axial adjustment, for the performance of a subsequent assembly step in entering an end-forming member in the shell. _ 13. A method of assembling components of a **container** having a rigid outer casing, including a tubular shell and end-forming members entered therein, and a receptacle of Hexible material for the contained product adapted to be supported within the outer casing, which consists in distending a paper **bag** having a **sealed** bottom, and icementing to the outer surface tl'1ereof'a sheet of corrugated paper board, with the web of the corrugated sheet opposed to the **bag** surface, to form an external surrounding wallfor the **bag** extending from the bottom thereof to a point below the mouth of the **bag**, to form a _bag assembly, then collapsing the **bag** assembly and inserting the collapsed **bag** assembly within the tubular shell which is to form a part of the outer casing of the **container**, and dilating the **bag** to -simultaneously expand the external corrugated wall thereof into conforming frictional adherence with the inner wall of the shell, and then adjust-. ing the expanded **bag** assembly axially in frictional engagement with the shell to locate the bottom surface of the **bag** in predetermined inwardly spaced relation to the adjacent end of the shell. , 14. A method of assembling components of a **container** having a rigid outer casing, including a tubular shell and end-forming members entered therein, and a receptacle of Hexible material for the contained product adapted to be supported within the outer casing, which consists in distending a paper **bag** having a **sealed** bottom, and cementing to the outer surface thereof a sheet of corrugated paper board,'With the Web of the corrugated sheet opposed to the **bag** surface, to form an external surrounding wall for the **bag** extending from the bottom thereof to a point below the mouth of the **bag**, to form a **bag** assembly, then collapsing the _bag assembly and inserting the collapsed **bag** assembly within the tubular shell which is _to form a part of the outer casing of the **container**, and dilating the **bag** to simultaneously expand the external corrugated wall thereof into conforming frictional adherence with the 'inner wall of the shell, and then adjusting the expanded **bag** assembly axially in frictional engagement with the shell, to locate the bottom of the **bag** and the surrounding edge of the external corrugated wall of the **bag** assembly in predetermined inwardly spaced relation to the adjacent end of the shell, for the performance of a subsequent operation for frictionally entering an end-forming member in said shell in an amount nxed by the spacing of the opposed edge of the external wall of the **bag** assembly inwardly of the end of -the shell and in abutment with such opposed edge



20) Family number: 21408819 (US2370680A)

Title:	**CONTAINER** AND METHOD OF MAKING SAME
Priority:	US19410421589 19411204

Family:

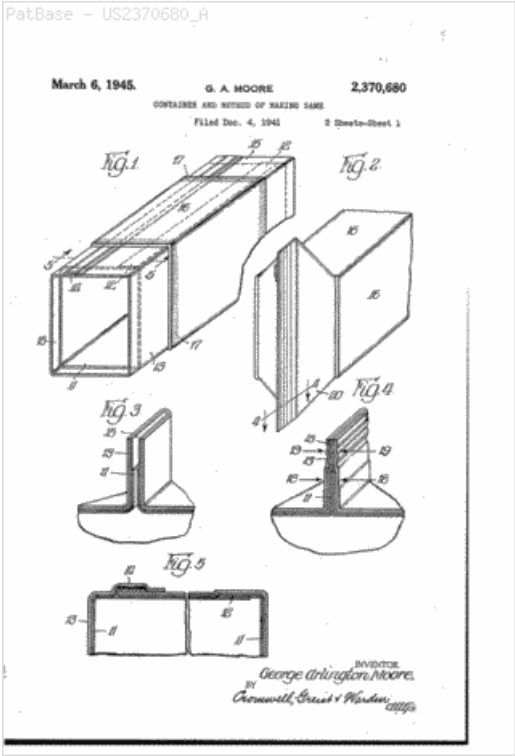
Publication number	Publication date	Application number	Application date
US2370680 A	19450306	US19410421589	19411204

Probable Assignee:	SHELLMAR PRODUCTS CO
Assignee(s):(std):	SHELLMAR PRODUCTS CO ; SHELLMAR PRODUCTS COMPANY
Inventor(s):(std):	ARLINGTON MOORE GEORGE
Inventor(s):	MOORE GEORGE ARLINGTON
International class (IPC 8-9):	B65D65/40 B65D77/00 (Advanced/Invention); B65D65/40 B65D77/00 (Core/Invention)
International class (IPC 1-7):	B65D33/22 B65D5/26 B65D5/60 B65D5/62 B65D77/02
CPC:	B65D65/40 B65D77/00
European class:	B65D65/40 B65D77/00
US class:	229/117.33 383/108 383/109 383/202 383/209 493/189 493/217
Classification Explorer	
Forward Citations:	USD682683, US5080643, US4954124, US4340379, US4064302, US3896991, US3126796, US2944715, US2926830, US2739727, US2582286, US2527692, US2512383, DE3217156, DE1069524, DE1045896,

Abstract:

Source: US2370680A Having described my invention, what I claim as new and desire to secure by Letters Patent, ls: 1. A method of forming a **container**, comprising in combination, folding a sheet of waxed lln~ ing material to form a tube having a marginal overlap, heat-**sealing** the overlap to form a longitudinal seam, folding a larger sheet of laminated paper and rubber hydrochloride material around said lining material with the rubber hydrochloride facing innermost to expose marginal portions of the larger sheet at each extremity of the tube andyto obtain fa 'second marginal overlap remote from said Hrst named overlap, heat-**sealing** said second overlap to form another longitudinal seam, providing a reinforcing paper hoard material having a predetermined stripe of thermoplastic hot-melt adhesive and folding the same about an intermediate portion of said tube with a. marginal overlap, heat-**sealing** said reinforcing member in the region of said predetermined stripe to form a third longitudinal seam to complete the tube and to alllx the reinforcing material to the body thereof, folding the materials at one end of the tube extending beyond the reinforcing material so that the wax liner and the rubber ` i t hydrochloride surpluses are brought in face-toface contact with themselves, effecting a primary **seal** in the region of said face-to-face wax area, effecting a secondary **seal** of said face-to-face rubber hydrochloride area at increased temperature, folding said **sealed** portion inwardly »to form a. bottom **closure**, providing a reinforcing paper base board having a predetermined marginal stripe of thermoplastic hot melt adhesive to said bottom **closure**, heat-**sealing** said marginal area against the sides of said **container** and, after filling said **container** through the remaining **open** portion, similarly **sealing** the same as said bottom **closure** and folding the **sealed** portion against the 'top and sides of the **container**. f 2. A **container**, which comprises in combination a folded sheet of waxed lining materiel formed into a tube having a marginal overlap. said overlap being heat-**sealed** to form a longitudinal seam, a larger sheet of laminated paper and rubber hydrochloride material being folded around said lining material with the rubber hydrochloride facing innermost exposing marginal portions of said larger sheet at each extremity of the tube and having a second marginal overlap remote from said first named overlap, said second overlap being heat-**sealed** to form another longltudinal seam. a. reinforcing paper board material having a predetermined stripe of thermoplastic hot melt adhesive being folded about an intermediate portion of saidunderlying tubular formation and having a marginal overlap, said reinforcing member being heat»**sealed** at said overlap and in the region of said predetermined stripe forming a, third longitudinal seam to complete said tubular formation and to allix said reinforcing material to the underlying portion of said laminated paper and rubber hydrochloride material, the materials at one end of the tube extending beyond the reinforcing material being folded so that the wax liner and rubber hydrochloride surpluses are brought in face-to-face contact with themselves, said face-to-face wax area having a, primary block **seal** and said face-to-face rubber hydrochloride area having a secondary **seal**, said **sealed** portions being inwardly folded to provide a bottom **closure**, a reinforcing paper base board having 9. predetermined marginal stripe of thermoplastic hot melt adhesive being ailixed to said reinforcing paper board material and confining said bottom **closure** in concealed position. said marginal areas being heat-**sealed** against the sides of said **container**, said **container** when filled through the remaining **opening** being adapted similarly' to be **sealed** across said **opening** and to be folded to form a top **closure**. 3. A method of forming a **container**, comprising in combination, folding a sheet oi heat-**sealable** lining material to form a tubehavlne a marginal overlap; heat-**sealing** the overlap to form a longitudinal seam, folding a. larger sheet of laminated paper and rubber hydrochloride material around said lining material with the rubber hydrochloride facing innermost to expose marginal portions of the larger sheet at each extremity of the tube and to obtain a second marginal overlap, heat-**sealing** said second overlap to form another longitudinal seam, providing a reinforcing paperboard material having predetermined stripes of thermoplastic adhesive thereon and folding the same about an intermediate portion of said tube and with a marginal overlap, heatseallng said reinforcing member in the region of said predetermined stripes of adhesive to form a third longitudinal seam to complete the tube 4 z,svo,eso structure and to Enix the reinforcing material to the body portion thereof, folding the materials at one end of the tube extending beyond the TElniorcing material so that portions of the heatseaiable liner material and the rubber hydrochloride surpluses are brought in face-to-face contact with themselves, effecting 2. **seal** in the region of said face-to-face contacting areas, folding said **sealed** portion inwardly to provide a, bottom **closure**, filling said **container** with 9. food product through the **open** end thereof, squeezing the **open** end to bring opposite faces of said liner material and said rubber hydrochloride together respectively in face-to-face contact, heat-**sealing** said contacting faces of liner material by an amount oi' heat and pressure surrounding the area of contact of said liner material which is less than the amount required to fuse rubber hydrochloride but sumclent to form a. primary block **seal** against penetration of gases, subsequently generated, from reaching said food product, and substantially simultaneously applying heat and pressure to the area surrounding said contacting faces of rubber hydrochloride to form a secondary hermetic **seal** across the top of said resulting **package**, 4. A **container**, which comprises in combination, a. folded sheet of heat-**sealable** lining material formed into 9, tube having a marginal overlap, said overlap being **sealed** and providing a longitudinal seam, a larger sheet of laminated paper and rubber hydrochloride material being folded around said lining material with the rubber hydrochloride facing innermost exposing marginal portions of said larger sheet at each extremity of the tiibe and having a. second marginal overlap at the remaining free ends, said second overlap being heat-**sealed** to form another longitudinal seam. a. reinforcing paperboard material having predetermined stripesof thermoplastic adhesive being folded about an intermediate portion of said underlying tubular formation and having a marginal overlap, said reinforcing member being heat-**sealed** at said overlap and in the region of said predetermined stripes of adhesive providing a third longitudinal seam to complete said tubular formation and ainxing said reinforcing material to the body of said tubular formation, the materials at one end of the tube extending beyond the reinforcing material heing folded so that the liner and rubber hydrochloride surpluses are brought in face-toface contact with themselves, said face-to-face contacting areas being heat-**sealed** to provide 2. bottom **closure** for said **container**, the body of said **container** being filled with a food product, the remaining end of said **container** being squeezed together with opposite faces of said liner material and said rubber hydrochloride respectively being in face-to-face contact, said crmtacting faces of liner material being heat-**sealed** and providing n primary block **seal** against the penetration oi' gases generated in subsequent **sealing** operations from contaminating said food product, and said contacting faces of said rubber hydrochloride being heat-fused together to form a secondary hermetic **seal** across the top of said **package**. ,5. In a method of fabricating an hermetically **sealed** **container** from a web of heat-**sealable** liner material having a wrap of heat-fusible material containing a food product hermetically **sealed** therein and being free from food contaminating 'gases resulting from the heat-fusing operation of **sealing** the mouth of the **container**, comprising folding 9. Web of liner material to form aa. tube having a. marginal overlap and heatsealing the same to provide a longitudinal seam, folding a. larger Web of rubber hydrochloride as a wrap around said lining material'with marginal ends thereof extending beyond the ends of the lining material with the remaining free ends forming as. marginal overlap, and heat-**sealing** said overlap to form a. second

longitudinal seam to provide a lining encompassing tube, squeezing one end of said tube together to bring opposite faces of said liner material and said rubber hydrochloride together respectively in face-to-face contact, and heat-**sealing** the same to provide an hermetic bottom seam and a. bottom wall thereby forming said tubular structure into a **container**. folding said bottom seam against said bottom wall, Hlling said **container** with a food product through the **open** end thereof, squeezing the **open** end of said **container** together to bring opposite faces of said liner material and said rubber hydrochloride together respectively in face-to-face éontact, heat-**sealing** said contacting faces of liner material together by an amount of heat and pressure, surrounding the azsea of contact of said liner material, which is less than the amount of heat required to fuse rubber hydrochloride but suflicient to form S. primary block **seal** against gases generated in a subsequent **sealing** action from reaching said food product, and substantially simultaneously applying heat and pressure to the material surrounding said contacting faces of rubber hydrochloride to form s. secondary hermetic **seal** across the top of said **Package**. 6. In a hermetically **sealed** **container** fabricated from Webs of heat-sea.lz\.ble liner material having e, wrap of he=1t~fusibIe material containing sa. food product hermetically **sealed** therein and being free from fond contaminating gases resulting from the heat-fusing operation oi **sealing** the mouth of the **container**, comprising s. web of lining material folded to provide ax. tube lxaving a marginal heat-**sealed** overlap providing 9. longitudinal seem, a larger web of rubber hydrochloride as 2. Wrap encompassing said lining material having marginal ends thereof extending beyond the ends of the lining material with the remaining free ends forming a. marginal overlap and being heat-**sealed** into a, longitudinal seam forming za. lining encompassing tribe, one end of said_ tubetjoeing squeezed together with opposite faces of said liner material and said rubber hydrochloride respectively being in faceto-face contact, being heat-**sealed** and providing an hermetic bottom seam and wall with the remaining portions of the tubular structure constituting at **container**, said **container** having a food product therein free of contaminating gases generated in subsequent **sealing** operations, the remaining end of said **container** being squeezed together with opposite faces of said liner material and said rubber hydrochloride respectively being in face-to-face contact, said contacting :aces of said liner material being' heat-**sealed** and providing a primary **seal** against infiltration of gases generated in subsequent **sealing** operations of said. seam, and said contacting faces of rubber hydrochloride being heat-**sealed** where they are in face-to-face contact to form a secondary hermetic **seal** across the top of said **package**



21) Family number: 21623410 (US2373744A)

© PatBase

Title:	BAG CLOSURE
Priority:	US19410416505 19411025

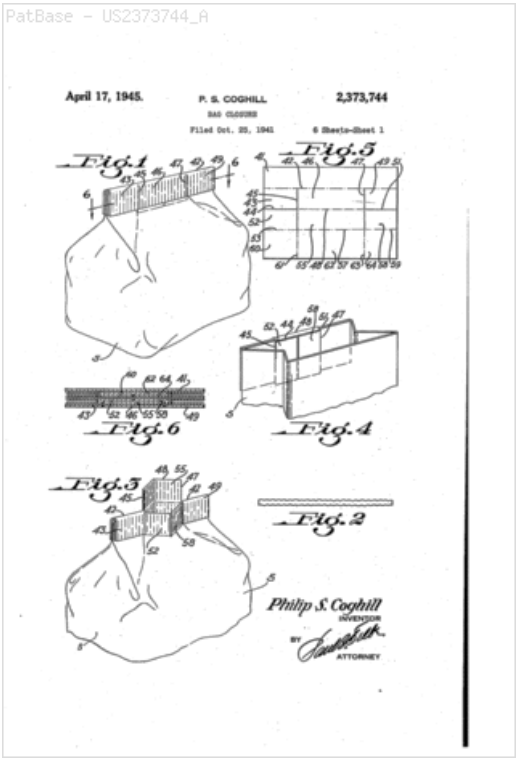
Family:

Publication number	Publication date	Application number	Application date
US2373744 A	19450417	US19410416505	19411025

Probable Assignee:	DU PONT
Assignee(s):(std):	DU PONT
Assignee(s):	E I DU PONT DE NEMOURS AND CO ; E I DU PONT DE NEMOURS AND COMPANY
Inventor(s):(std):	COGHILL PHILIP S
International class (IPC 8-9):	B65D33/16 B65D33/36 (Advanced/Invention); B65D33/16 B65D33/36 (Core/Invention)
International class (IPC 1-7):	B65D33/16 B65D33/24 B65D33/36
CPC:	B65D33/1691
European class:	B65D33/16H
US class:	156/292 156/308.4 383/81 493/199 493/214
Classification Explorer	
Forward Citations:	US6048100, US4301925, US3271223, US2765974, US2713746, US2707694, US2704108, US2697531, US2675957, US2666006, US2576594, US2480500, US2473932, US2471299, US2458972, DE1105338,

Abstract:

Source: US2373744A 1. The method of closing the open mouth of a bas, or like container, composed of a heat sealable material which comprises positioning a closure member having at least two legs over the mouth of said bag with one of said legs projecting wIthin the mouth of said bag, said inwardly projecting leg having a Width less than the length of the mouth of said bas and heat sealing to each other the opposite sides of the mouth of said bag which contact each other adjacent said inwardly projecting leg, said in~ Wardly projecting leg preventing a heat seal across the entire mouth of said bag and providing an opening into said bag upon severing said closure adjacent said leg.



22) Family number: 22187514 (US2416439A)

Title:	Vending machine
Priority:	US19410391907 19410505 US19440546779 19440727 US19440556540 19440930

Family:

Publication number	Publication date	Application number	Application date
US2377413 A	19450605	US19410391907	19410505
US2413304 A	19461231	US19440556540	19440930
US2416439 A	19470225	US19440546779	19440727

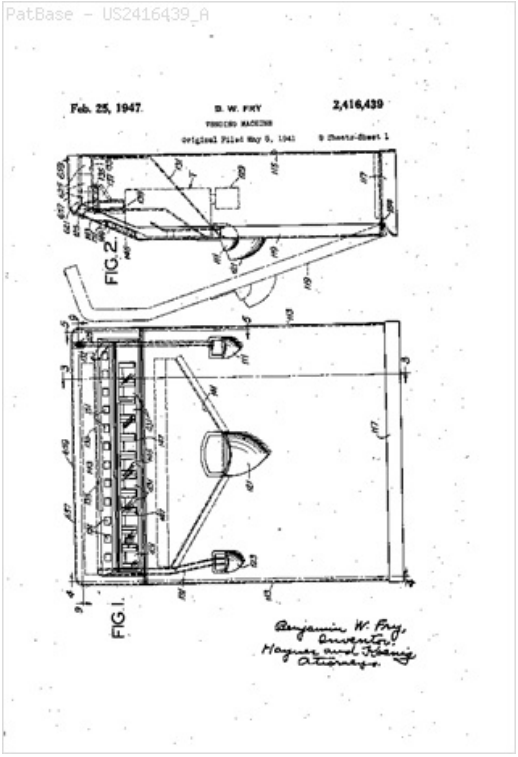
Probable Assignee:	NAT VENDORS INC
Assignee(s):(std):	FRY BENJAMIN W ; NAT VENDORS INC
Assignee(s):	NATIONAL VENDORS INC
Inventor(s):(std):	FRY BENJAMIN W
International class (IPC 8-9):	G07F11/10 G07F11/42 (Advanced/Invention); G07F11/02 G07F11/04 (Core/Invention)
International class (IPC 1-7):	G07F11/10 G07F5/24
CPC:	G07F11/10 G07F11/42
European class:	G07F11/10 G07F11/42
US class:	192/100 194/227 194/244 194/304 200/5R 221/112 221/129 221/131 221/155 221/192 221/198 221/225 221/238 221/267 221/270 221/279

Classification Explorer

Cited documents:	US987634 A, US746028 A, US479117 A, US1485716 A, US1286809 A, GB189214633 A,
Forward Citations:	US5310035, US3486658, US3278079, US3197150, US3121485, US3107000, US2996163, US2973076, US2973075, US2858042, US2848158, US2843242, US2834512, US2739603, US2706551, US2704590, US2671546, US2669335, US2665791, US2661827, US2650149, US2627962, US2607463, US2593102, US2542034, DE1267896,

Abstract:
Source: US2416439A I claim: l. In vending apparatus, means to deliver **units** comprising means to contain a plurality of horizontal columns of said **units** arranged in a horizontal plane, a plurality of reciprocating means in a common plane normal to the plane of said columns for withdrawing **units** successively from the respective columns, coordinated Scotch-yoke means operating in a vertical plane and respectively controlling the reciprocating means, a follower member on each column of **units** at one end thereof, follower cord reaches extending from each follower along two sides of its respective column, guide means at the opposite end of the column adjacent said reciprocating means for guiding said cord reaches, and vertically sliding weights operative in a plane closely adjacent to the plane of operation of said reciprocating means to which said cords are attached, the driving elements of said Scotch-yoke mechanisms heing phased at 120 degrees with respect to one another. 2. In vending apparatus, a case, a horizontal **Package**-holding **box** comprising a horizontal channel for a horizontal column of **Packages**, supporting means for said **box** within said case, quick detachable means between said supporting means and **box** allowing tilting of the **box** to allow for reaching of parts therebelow or complete removal from its supporting means, a follower for the column of **packages** within the channel, a loop of cord extending from two points on the follower and extending horizontally along the channel, guide means at the front end of the channel for suspending depending portions of the loop, said **box** bein! formed with an outlet through which **packages** may he moved, reciprocating extracting means mounted for move- 11192115 in said case ‘and operating at said outlet but being free ol’ physical connection with the **box** whereby the latter may be freely tilted or l'€m0V€d from its supporting means, means in said case for reciprocating said reciprocating means, a suspended weight movable in the case, and quick detachable connections between the cord and weight comprising means on the weight under which the cord is removably looped. 3» In Vehdins apparatus, a case, a h0l'|Z0htB] **package**-holding **box** comprising a, plurality of horizontal channels for horizontal columns of **packages**, supporting means for said **box** within the case, quick detachable means between said supporting means and **box** allowing tilting of the **box** to allow for reaching ot parts therebelow or complete removal from its supporting means, an **openable** **cover** over the **box** allowing access thereto without removal of the **box**, individual followers for columns- of **packages** within the channels, individual loops of cord extending from two points on each follower and extending hor1~ zontally along the channels, guide means at the irvnt ends of the channels for suspending de- pending portions of the loops. said **box** being formed with outlets through which **packages** may be extracted, reciprocating extracting means mounted for movement in said case and cooperating with said outlets but being free of physical connections with the **box** whereby the latter may be freely tilted or removed from its supporting means, means in said case for reciprocating said reciprocating means, suspended sliding weights movable in the case, and quick detachable connections between the cords and weights comprising means on the weights under which the cords are removably looped. 4. In vending apparatus, a plurality of parallel substantially horizontal channels for holding columns of **package** **units**, said channels having delivery outlets at the forward ends thereof, a. plurality of slotted reciprocating plates movable in a substantially vertical plane adjacent the forward ends of said channels and providing means for withdrawing **units** successively from the respective channels throush the outlets and dropping them, rotary pin means operating in a substantially vertical plane and respectively cooperating with the slots in said plates for controlling them, a follower member in each channel acting against -the rearward end of the column of **package** **units** therein, follower cords extending from each follower along the sides of the respective column, guide means at the forward ends of said channels adjacent the Plates for guiding said cords, and vertically sliding weights to which said cords are attached operative in a plane closely adjacent to the plane of operation of said plates. 5. In vending apparatus, a plurality of parallel substantially horizontal channels for holding columns of '**package** **units**, said channels having delivery outlets at the forward ends thereof, a plurality of reciprocating members movable in a substantially vertical plane adjacent the forward ends of said channels and providing means for withdrawing' **units** successively from said channels, said channels through the outlets and reciprocating members forming an L-shaped arrangement of parts, rotary means lyIngywithin the angle of said L-shaped arrangement for reciprocating said members, a follower member in each channel for the column of **package** **units** therein, a loop of cord extending from two points on each follower longitudinally along each channel and vertically outside of said reciprocating members, and means biasing said loops to cause said followers to bias said columns of **units** toward the forward ends of said channels.

PatBase - US2416439_A



23) Family number: 21793701 (US2385751A)

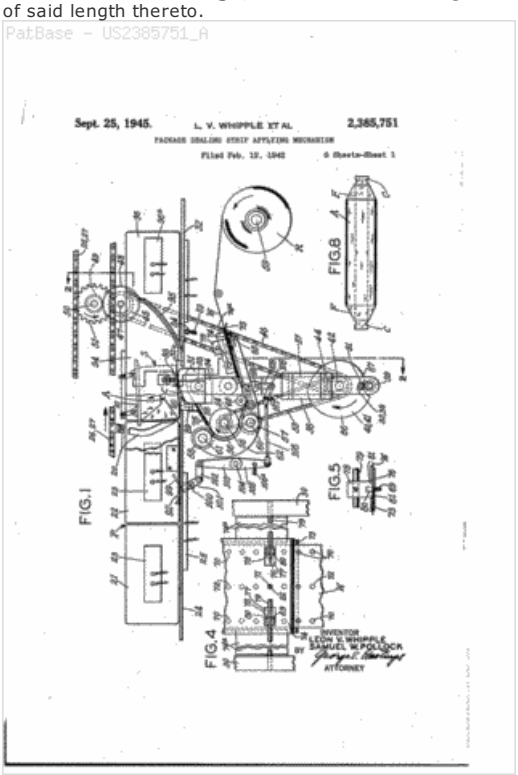
Title:	PACKAGE SEALING STRIP APPLYING MECHANISM
Priority:	US19420430598 19420212

Family:

Publication number	Publication date	Application number	Application date
US2385751 A	19450925	US19420430598	19420212

Probable Assignee:	AMERICAN MACH AND FOUNDRY
Assignee(s):(std):	AMERICAN MACH AND FOUNDRY
Assignee(s):	AMERICAN MACHINE AND FOUNDRY CO ; AMERICAN MACHINE AND FOUNDRY COMPANY
Inventor(s):(std):	WHIPPLE LEON V ; POLLOCK SAMUEL W
International class (IPC 8-9):	B65C1/04 (Advanced/Invention); B65C1/00 (Core/Invention)
International class (IPC 1-7):	B65C1/06
CPC:	B65C1/042 Y10T156/1339
European class:	B65C1/04B
US class:	156/521 156/DIG.4 53/136.3 53/415 53/73
Classification Explorer	
Forward Citations:	US9676141, US8828170, US3516891, US3379332,

Abstract:
Source: US2385751A 1. In a strip **sealing** mechanism, a D0»cka8e runway provided- with a strip §eBling station, and means for moving packagesto be **sealed** through said runwayahd to saidstation, means for mounting a roll supply of relatively wide webstrin **sealing** material beneath said runwv-y,meB-118 for feeding said strip **sealing** material beneath said runway and in the direction of movement of a **package** located at said station to receive said strip, means for cutting a short length from the leading end of said web, means for raising said length and anlxing an edge thereof to said **Package**, and means for moving said **package** from said station along said runway to complete the application of said length thereto.



24) Family number: 21803993 (US2430995A)

Title:	END-**SEALED** THERMOPLASTIC **CONTAINER** BODY
Priority:	US19420470813 19421231

Family:

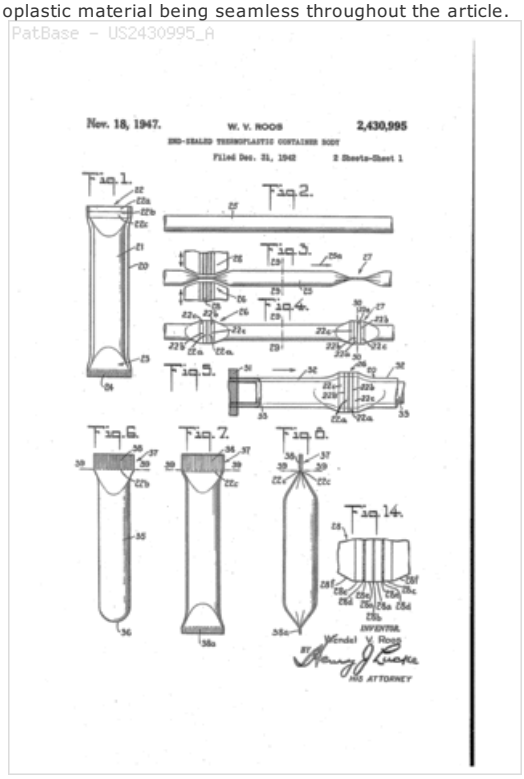
Publication number	Publication date	Application number	Application date
US2430995 A	19471118	US19420470813	19421231

Probable Assignee:	LAWRENCE ROOS WILLIAM
Assignee(s):(std):	LAWRENCE ROOS WILLIAM
Inventor(s):(std):	LAWRENCE ROOS WILLIAM
Inventor(s):	ROOS WILLIAM LAWRENCE
International class (IPC 8-9):	B65B9/12 B65D75/44 (Advanced/Invention); B65B9/10 B65D75/00 (Core/Invention)
International class (IPC 1-7):	B29C27/02 B31B23/60 B65B9/12 B65D75/42
CPC:	Y10S206/82 B65B9/12 B65D75/44 Y10T29/49792 Y10T29/49808
European class:	B65B9/12 B65D75/44
US class:	206/820 222/107 222/541.6 229/5.6 29/414 29/422 383/94 53/436 53/450

Classification Explorer

Cited documents:	US706541 A, US700806 A, US529656 A, US2297690 A, US2297375 A, US2294220 A, US2257823 A, US2249004 A, US2200971 A, US2194451 A, US2188191 A, US2154521 A, US2146308 A, US2145941 A, US2142505 A, US2134489 A, US2129627 A, US2125758 A, US2121966 A, US2103389 A, US2012531 A, US2008659 A, US1959978 A, US1948605 A, US1875975 A, US1753665 A, US1690534 A, US1552509 A, US1526782 A, US1266413 A, GB472874 A,
Forward Citations:	WO9501921, US8485728, US7862841, US5100028, US5035348, US4988016, US4979656, US4735675, US4617781, US4399601, US4363205, US4199915, US4148198, US3913207, US3908799, US3674135, US3620679, US3601252, US3482012, US3334407, US3273596, US3221978, US3200486, US3190441, US3189227, US3162706, US3162539, US3151736, US3060653, US3037869, US3000495, US2977729, US2958169, US2944706, US2941660, US2940230, US2928216, US2898027, US2872081, US2870583, US2853187, US2844249, US2828591, US2819738, US2815150, US2793481, US2764862, US2723779, US2682974, US2663461, US2628013, US2624992, US2601568, US2543181, US2530400, US2508197, US2016059998, US2014353336, US2014061235, US2010193515, US2008170814, US2005098193, KR100845024, EP0705204, DE923417, DE1157995, DE1063445, DE1037355, DE1036155, DE1034094,

Abstract:
Source: US2430995A 1. An article of manufacture, a **container** comprising a, hollow body portion having a hollow outwardly converging **dispensing** portion of thermoplastic material; oppositely related and mutually face-to-face normally contacting but unfused liattened areas of thermoplastic material' disposed immediately adjacent the outward end of said **dispensing** portion; and mutually fused areas of thermoplastic material disposed outwardly of said oppositely related and mutually face-to-face normally contacting but unfused flattened areas, said mutually fused areas serving to **seal** the outward end of said **dispensing** portion prior to being **opened**, the area of the thermoplastic material between said mutually face~to-face normally contacting but unfused Battened areas and said mutually fused areas being weakened, whereby the **container** is rendered **openable** upon breakage of the thermoplastic material at said weakened area, the thermoplastic material being seamless throughout the article.



25) Family number: 21811792 (US2431786A)

Title:	**DISPENSING CONTAINER**
Priority:	US19430496538 19430729

Family:

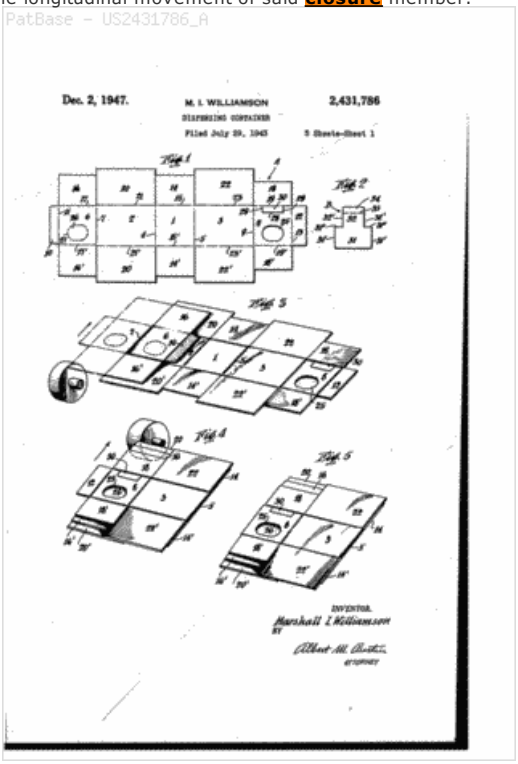
Publication number	Publication date	Application number	Application date
US2431786 A	19471202	US19430496538	19430729

Probable Assignee:	NAT FOLDING BOX CO INC
Assignee(s):(std):	NAT FOLDING BOX CO INC
Assignee(s):	NATIONAL FOLDING BOX CO INC
Inventor(s):(std):	WILLIAMSON MARSHALL I
International class (IPC 8-9):	B65D5/72 (Advanced/Invention); B65D5/72 (Core/Invention)
International class (IPC 1-7):	B65D5/74
CPC:	B65D5/723
European class:	B65D5/72B2
US class:	222/541.9 222/561 229/125.12

Classification Explorer

Cited documents:	US940634 A, US561112 A, US2342081 A, US2330926 A, US2093143 A, US1998862 A, US1951274 A, US1803612 A, US1007390 A, GB414509 A,
Forward Citations:	WO05032952, WO05032952, US9505520, US7337904, US4119263, US4062385, US3940035, US3258156, US2799441, US2676734, US2649994, US2516471, US2011297702, US2006124709, US2005067476,

Abstract:
Source: US2431786A 1. A **box** or carton comprising a multi-sided tubular body formed of side walls, and ioldable flaps for closing its ends, one side wall consisting of an inner panel and an outer panel, said inner panel having a securing **tab** hinged thereon secured to the inner surface of the wall panel adjacent said outer panel, said outer panel having a securing **tab** hinged thereon secured to the outer surface of the wall panel adjacent said inner panel, said inner and outer panels lying unattached face to face, each panel having a **dispensing** aperture therein, the apertures being in reglstry, the outer panel having further a U-shaped slit therein: and a substantially T-shaped **closure** member inserted between said outer and inner panels with freedom to slide therebetween, said **closure** member having a finger operable portion extendlng through said slit, the ends of the slit extending to an edge of said outer panel, a side flap hinged to said outer panel along said edge, said side flap abutting an edge of said **closure** member in withdrawn position and forming a. stop limiting the longitudinal movement of said **closure** member.



26) Family number: 22834250 (US3306001A)

Title: METHOD FOR PRODUCING A HERMETICALLY **SEALED** **PACKAGE**

Priority: US19640342689 19640205

Family:

Publication number	Publication date	Application number	Application date
BE464419 A	00000000		00000000
CH269358 A	19500630		19460417
CH437100 A	19670531	CH19650001577	19650205
DE1461836 A1	19690227	DE19651461836	19650205
FR939116 A	19481104		19460403
GB1049610 A	19661130	GB19640053001	19641231
GB610653 A	19481019	GB19460011329	19460412
NL124809 C	00000000		00000000
NL6501385 A	19650806	NL19650001385	19650203
US3306001 A	19670228	US19640342689	19640205

Probable Assignee: DIAMOND INT CORP

Assignee(s):(std)**:** DIAMOND INT CORP ; INT STANDARD ELECTRIC CORP ; STANDARD TELEPHON AND RADIO AG ; STANDARD TELEPHONES CABLES LTD

Assignee(s): STANDARD TELEPHON U RADIO AG ; STANDARD TELEPHONES AND CABLES LTD ; SMURFIT DIAMOND PACKAGING CORP ; SMURFIT DIAMOND PACKAGING A DE CORP CORP ; CONTINENTAL ILLINOIS NATIONAL BANK AND TRUST CO ; CONTINENTAL ILLINOIS NATIONAL BANK AND TRUST CO OF ; CONTINENTAL ILLINOIS NATIONAL BANK AND TRUST CO OF CHICAGO A NATIONAL BANKING ASSOCIATION

Inventor(s):(std)**:** GRIEG DONALD DAVID ; LABIN EMILE ; RADIO AG STANDARD TELEPHON UND ; RADIO STANDARD TELEPHON U AG ; WILLIAM STUART PEPPLER ; STUART PEPPLER WILLIAM ; PEPPLER WILLIAM S

Inventor(s): AG STANDARD TELEPHON UND RADIO ; STANDARD TELEPHON U RADIO AG

International class (IPC 8-9): B65B9/20 B65B9/213 H03K9/00 H04B14/02 (Advanced/Invention); B65B9/10 H03K9/00 H04B14/02 (Core/Invention)

International class (IPC 1-7): B65B9/10

CPC: B65B9/213 B65B2220/18 H03K9/00 H04B14/026 B65B9/20

European class: B65B9/20 B65B9/213 H03K9/00 H04B14/02B L65B220/18

US class: 53/449 53/451

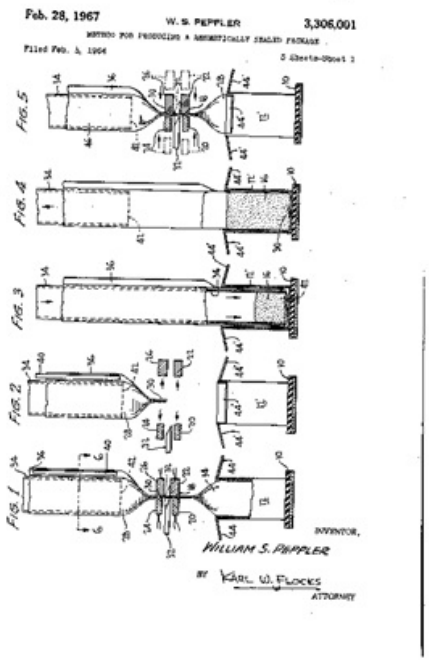
Classification Explorer

Cited documents: US3237371 A, US3114994 A, US2969627 A, US2532871 A, US2214944 A,

Forward Citations: US6058680, US5533324, US5417039, US5014501, US4648233, US4582555, US4534818, US4510737, US4341054, US4287703, US4173106, US4132051, US4055032, US3543467, US2011162327, DE1088092,

Abstract:
Source: GB610653A 610,653. Pulse modulation. STANDARD TELEPHONES and CABLES, Ltd. April 12, 1946, No. 11329. Convention date, April 17, 1945. [Class 40 (v)] The signal-to-noise ratio of time-modulated pulses is improved by reducing the time displacements of the pulses to increase the time during which energy occurring between the pulses may be blocked. The time displacements of pulses may alternatively be increased after a blocking operation and in each case the change is produced by demodulating the pulses and using the resulting signal further to time modulate the modulated pulses. In one embodiment, time-modulated pulses in the output of a radio receiver 1 are passed to the demodulator 26, low-pass filter 27 and earphones 28, through a modulator 18 and amplifier 25. The demodulated signal output from filter 27 is also passed through a phase inverter 30 and variable-gain amplifier 31 to time-modulate the pulses passing through **unit** 18, by varying the value of the inductance 20 of a delay line as described in Specification 593,101. In this circuit the time-modulation range is reduced so that the gating pulse generator 34 and shaper 35 can be set to produce longer blocking pulses for application to amplifier 25. In another embodiment, Fig. 3 (not shown), the time-modulation range is increased after the incoming pulses have been gated by amplifier blocking pulses of the maximum possible duration. To this end, the phase inverter 30 is omitted, the amplifier 25 precedes the modulator 18, and its blocking pulse generator is controlled by the output of the latter.

PatBase - US3306001_A



27) Family number: 29697048 (GB627934A)

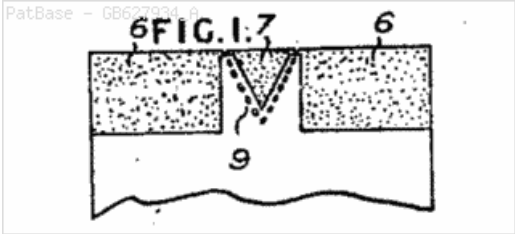
Title:	**Bag** structure

Family:

Publication number	Publication date	Application number	Application date
GB627934 A	19490818	GB19470023008	19470819

Probable Assignee:	WINGFOOT CORP
Assignee(s):(std):	WINGFOOT CORP
International class (IPC 8-9):	B65D75/58 (Advanced/Invention); B65D75/52 (Core/Invention)
International class (IPC 1-7):	B65D33/16 B65D33/22
CPC:	B65D75/5822
European class:	B65D75/58D1
Classification Explorer	
Forward Citations:	FR2814440, DE3026585, DE1096827, DE1059342,

Abstract:
Source: GB627934A 23008. Convention date, Jan. 24. [Classes 94(i) and 94(ii)] A **bag** of rubber hydrochloride **sealed** across the mouth and having towards the contents of the **bag** a perforated **seal** is characterised by a **sealed** area somewhat further from the mouth of the **bag** than all or most of the perforated **seal** for protecting the latter from strains. As shown, the **sealed** area comprises two rectangular parts 6 which flank a perforated **seal** 9 extending along the sides of a **sealed** area 7. In a modification a line of perforations lies across a corner of the **bag** within an unsealed area at the side of the **bag**. In a further modification the perforated **seal** is interposed between two transverse **sealed** areas, the inner one of which does not extend to the edges of the **bag**.



28) Family number: 30276818 (US3583460A)

Title: STERILE **COVER** FOR FLUID **CONTAINER** PORT

Priority: SE19450010039 19451229 US19690844521 19690724

Family:

Publication number	Publication date	Application number	Application date
AR192398 A1	19730221	AR19700230209	19700723
AU207017934 A1	19720127	AU19700017934	19700723
BE753838 A	19710125		00000000
BE753838 A1	19710125	BE19700753838	19700723
BR7020794 A0	19730130	BR19700220794	19700723
CA954085 A1	19740903	CA19700083955	19700528
CH517027 A	19711231	CH19700011210	19700723
DE2036606 A1	19710408	DE19702036606	19700723
DE2036606 C3	19770428	DE19702036606	19700723
DK127576 B	19731203	DK19700003826	19700723
FR2060056 A1	19710611	FR19700027318	19700723
FR2060056 B1	19740201	FR19700027318	19700723
GB1325041 A	19730801	GB19700035811	19700723
JP49033156 B4	19740905	JP19700064018	19700723
NL152454 B	19770315	NL19700010938	19700723
NL7010938 A	19710126	NL19700010938	19700723
SE127576 B	19731203	SE19700003826	19700723
SE127576 C	19500314	SE19450010039	19451229
SE127576 C1	19500314	SE19450010039	19451229
SE407011 B	19790312	SE19700010203	19700723
SE407011 C	19790621	SE19700010203	19700723
US3583460 A	19710608	US19690844521	19690724
ZA7005058 A	19710428	ZA19700005058	19700723

Probable Assignee: UNION CARBIDE CORP

Assignee(s):(std)**:** UNION CARBIDE CORP ; UNION CARBIDE CORP 270 PARK AVENUE NEW YORK ETAT ; UNION CARBIDE CORP NEW YORK N Y V ST A ; UNION CARBIDE CORP US ; UNION CARBIDE NEW YORK CORP

Assignee(s): UNION CARBIDE CORP 270 PARK AVENUE NEW YORK ETAT DE NEW YORK E U A ; WINOKUR LOUIS L ; UNION CARBIDE CORP 270 PARK AVENUE NEW YORK ETAT D ; FAUST CLIFFORD C ; KAVESH SHELDON

Inventor(s):(std)**:** FAUST C ; FAUST C C ; FAUST C US ; FAUST CLIFFORD C ; FAUST CLIFFORD CHARLES ; FAUST CLIFFORD CHARLES RIVERSIDE ; ILL ; KAVESH C ; KAVESH S ; KAVESH S US ; KAVESH SHELDON ; KAVESH SHELDON HOMEWOOD ; L L WINOKUR ; LL WINOKUR ; LOUIS LLOYD WINOKUR ; S KAVESH ; SHELDON KAVESH ; WINOKUR L ; WINOKUR L L ; WINOKUR L US ; WINOKUR LOUIS L ; WINOKUR LOUIS LLOYD ; WINOKUR LOUIS LLOYD EVANSTON ; BUSER W ; C C FAUST ; CC FAUST ; CLIFFORD CHARLES FAUST

Inventor(s): CLIFFORD CHARLES FAUST SHELDON KAVESH AND LOUIS LLOYD WINOKUR ; CHARLES FAUST CLIFFORD ; LLOYD WINOKUR LOUIS

International class (IPC 8-9): A61B5/15 A61J1/05 A61J1/10 A61J1/14 A61M39/00 A61N1/02 B65D33/16 B65D41/00 B65D83/00 B65D85/18 B65D85/50 (Advanced/Invention);
A61B5/15 A61J1/05 A61J1/10 B65D41/00 (Core/Invention)

International class (IPC 1-7): A61B19/00 A61J1/08 A61M5/00 A61M5/14 B61L B65D33/00 B65D33/16 B65D41/00 B65D51/00 B65D85/00 B65D85/72

CPC: Y10S383/906 A61J1/10

European class: A61J1/05B2 A61J1/10

US class: 138/89 138/96R 150/8 383/80 383/9 383/906 493/212 604/263 604/408 604/415

Classification Explorer

Cited documents: US3276447 A, US3205889 A, US2997043 A, US2145705 A, US2104031 A, FR1142421 A,

Forward Citations: WO17165779, US9539174, US8905944, US8622213, US5564591, US5391163, US5161581, US4946432, US4596554, US4119128, US4066556, US4023607, US3909910, US3865411, US2013324883, US2010294693, EP0124539,

Abstract:
Source: GB1325041A 1325041 Sterile **cover** for a blood **bag** tube UNION CARBIDE CORP 23 July 1970 [24 July 1969] 35811/70 Headings B8C and B8K [Also in Division A5] The inlet or outlet plastics tube 20 of a **container** (10, Fig. 1) for viable fluids e.g. blood is closed by a sheath 32 having at least one circumferential **seal** 38 and is **opened** by pulling end **tabs** 34, 36 so that most of the sheath is progressively inverted before removal from the tube. To ensure inversion, either additional transverse **seals** may be provided on one or both sides of the sheath or longitudinal **seals** (44, Fig. 6) may be provided on both sides of the sheath. The sheath may be formed from a folded strip, two superimposed strips (25, 27, Fig. 3) or a tube having permanent edge **seals** e.g. 28, 30 and loosely fitting around the tube or from an elastic or heat-shrinkable film having edge **seals** e.g. 28, 30 and tightly fitting around the tube. The **seals** may or may not display visible and/or tactile evidence of having been broken after peeling and may be formed by adhesives or heat-**sealing**. The end **tabs** may be **sealed** together at their extremities (Fig. 5). The sheath may be made of an ionic cross-linked ethylene monocarboxylic acid co-polymer as disclosed in U.S.Patent 3,264,272, L.O. polythene, vinyl and vinylidene chloride polymers and co-polymers, E.V.A. coated on polyethylene terephthalate or on vinyl, heatshrinkable films of polythene, polypropylene or vinyl chloride-vinyl acetate copolymer or elastic films of polyurethane, polybutadiene, polyisoprene, butadiene-styrene copolymers or ethylene-propylene copolymers.

PatBase - US3583460_A

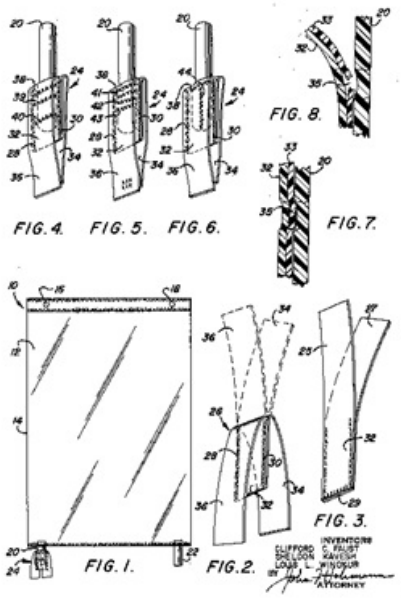


FIG. 4. FIG. 5. FIG. 6. FIG. 8. FIG. 7.

FIG. 1. FIG. 2. FIG. 3.

INVENTORS
CLIFFORD O. FAUST
SHELDON KAVESH
LOUIS WINDSOR
BY
ATTORNEY

29) Family number: 21948622 (US2522200A)

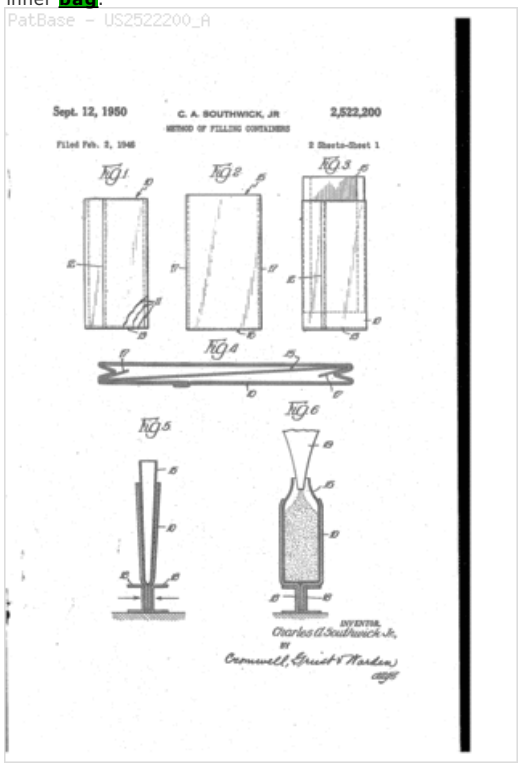
Title:	METHOD OF FILLING **CONTAINERS**
Priority:	US19460645079 19460202

Family:

Publication number	Publication date	Application number	Application date
US2522200 A	19500912	US19460645079	19460202

Probable Assignee:	SHELLMAR PRODUCTS CORP
Assignee(s):(std)**:**	SHELLMAR PRODUCTS CORP
Inventor(s):(std)**:**	SOUTHWICK JR CHARLES A
Inventor(s):	JR CHARLES A SOUTHWICK
International class (IPC 8-9):	B65B7/02 (Advanced/Invention); B65B7/00 (Core/Invention)
International class (IPC 1-7):	B65B7/02
CPC:	B65B7/02
European class:	B65B7/02
US class:	53/449 53/477
Classification Explorer	
Cited documents:	US2432968 A, US2406660 A, US2330015 A, US1976980 A, US1683771 A,
Forward Citations:	US9045274, US8646974, US6374579, US5007233, US3988873, US2013056472, US2007140599,

Abstract:
Source: US2522200A 1, A method of filling composite **bag** structures of the kind described which comprises providing an outer reinforcing **bag** and an inner liner bagof at least equal inner area to said outer **bag**, inserting said inner **bag** within said outer **bag** so that its bottom is spaced from said outer **bag** a substantial distance with the top of said inner **bag** extending from the top of said outer **bag**, squeezing together the bottom of said outer **bag** below the bottom of said inner **bag**, filling said inner bug, closing and securing together the top portions thereof, permitting the inner **bag** to settle to the bottom of the outer **bag**, and closing and securing together the top portions of the outer **bag** above the inner **bag**.



30) Family number: 22269166 (US2526824A)

Title:	WRAPPING MACHINE
Priority:	US19450609046 19450806

Family:

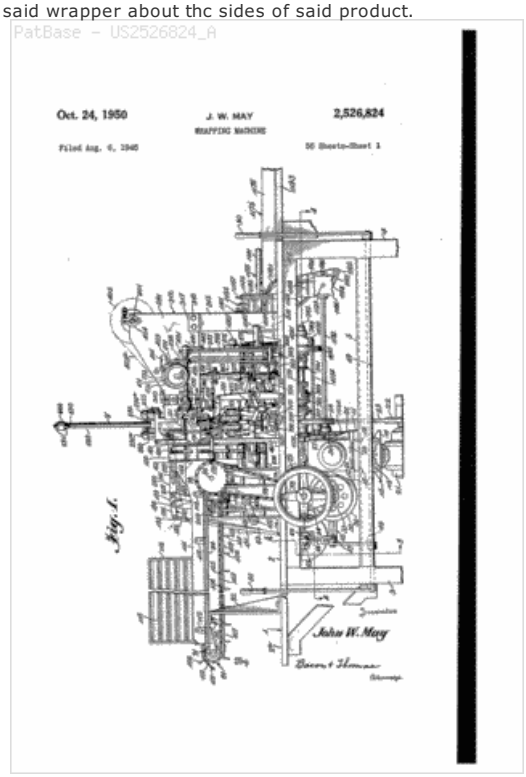
Publication number	Publication date	Application number	Application date
US2526824 A	19501024	US19450609046	19450806

Probable Assignee:	WRIGHT MACHINERY CO
Assignee(s):(std)**:**	WRIGHT MACHINERY CO
Assignee(s):	WRIGHT MACHINERY COMPANY
Inventor(s):(std)**:**	MAY JOHN W
International class (IPC 8-9):	B65B23/18 (Advanced/Invention); B65B23/00 (Core/Invention)
CPC:	B65B23/18
European class:	B65B23/18
US class:	53/136.1 53/221 53/223 53/371.8 53/387.4 53/55 53/57 53/73

Classification Explorer

Cited documents:	USRE18341 E, US829684 A, US828281 A, US2294275 A, US2201207 A, US2144448 A, US2074382 A, US1981256 A, US1915499 A, US1872903 A, US1816085 A, US1687488 A, US1664048 A, US1567706 A, US1468754 A, US1336838 A, US1301015 A, US1269308 A, US1259303 A, US1235805 A, US1234722 A, US1217694 A, US1117260 A, US1110090 A, US1054795 A, US1045391 A, US1001179 A, GB426781 A, GB331527 A,
Forward Citations:	US2727444, US2723516, US2680336, US2624991, US2603048,

Abstract:
Source: US2526824A (Claim 1) 1. In a wrapping machine, the combination comprising: an elevating wheel having a plurality of product receiving compartments mounted thereon; a receiving **box** for said product; means for transferring the product from one of the compartments cf said elevating wheel into said receiving **box**; a plate disposed below said receiving **box**, said plate having an **opening** aligned with said receiving **box**; means for feeding a wrapper onto said plate in overlying relation to said **opening**; fold forming means below said plate for folding said wrapper about the sides of said product as said product is moved relative to said fold forming means; and means for moving said product from said receiving **box** onto said wrapper and for pushing said wrapper and product through said fold forming means to eifect folding of said wrapper about thc sides of said product.



31) Family number: 22528735 (US2543084A)

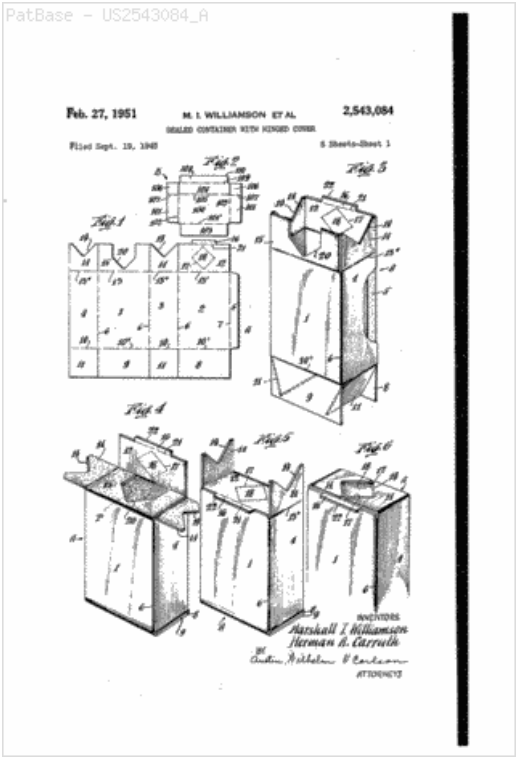
Title:	**SEALED CONTAINER** WITH HINGED **COVER**
Priority:	US19450617252 19450919

Family:

Publication number	Publication date	Application number	Application date
US2543084 A	19510227	US19450617252	19450919

Probable Assignee:	NAT FOLDING BOX CO INC
Assignee(s):(std):	NAT FOLDING BOX CO INC
Assignee(s):	NATIONAL FOLDING BOX CO INC
Inventor(s):(std):	CARRUTH HERMAN A ; WILLIAMSON MARSHALL I
International class (IPC 8-9):	B65D5/66 (Advanced/Invention); B65D5/64 (Core/Invention)
International class (IPC 1-7):	B65D5/70
CPC:	B65D5/6608
European class:	B65D5/66B2
US class:	229/125.05 229/125.08 229/145 229/242
Classification Explorer	
Cited documents:	US2407781 A, US2390392 A, US2369388 A, US2369387 A, US2369385 A, US2349605 A, US2330466 A, US2329628 A, US2017176 A, US1746006 A, US1683192 A,
Forward Citations:	US5893513, US5875961, US5810250, US5746370, US3794238, US3258156, US3087655, US2854184,

Abstract:
Source: US2543084A (Claim 1) 1. An improved hinge **cover** **container** comprising, a **box** part having a plurality of enclosing side panels forming a tubular body, a bottom wall panel closing the bottom end thereof, a plurality of inturned flaps respectively hinged to the upper ends of certain of said inclosing side panels of the **box** nart providing a plural-ply top wall panel for the **box** part, a hinged **cover** part having 4(an end wall panel adapted to **cover** the top wall panel of the **box** part, means for hingedly connecting said end wall panel to one of the enclosing side panels of the **box** part, **cover** flange panels joined to said **cover** end panel adapted to teleof the **box** part, cooperating abutment elements .associated with one of the **cover** flange panels and a free edge of one of the top wall flaps of the **box** part, said abutment elements being oper- r)o ative to releasably retain the **cover** part in closed position and releasably resist **opening** movement thereof, said top wall panel of the **box** part having means to provide a contents removing therein, said **cover** part when in I closed position being designed to provide a **closure** for such **opening**.



32) Family number: 21971342 (US2635628A)

Title: RELEASE VALVE

Priority: GB19500000192 19500104 US19460644062 19460129 US19500178637 19500810 US19490118611 19490929

Family:

Publication number	Publication date	Application number	Application date
GB668102 A	19520312	GB19500000192	19500104
US2592207 A	19520408	US19460644062	19460129
US2592209 A	19520408	US19490118611	19490929
US2635628 A	19530421	US19500178637	19500810

Probable Assignee: EDISON INC THOMAS A

Assignee(s):(std)**:** EDISON INC THOMAS A

Assignee(s): THOMAS A EDISON INC

Inventor(s):(std)**:** STAMPER WILLSON Y

International class (IPC 8-9): F16K17/04 H01M2/04 H01M2/10 H01M2/12 H01M2/34 (Advanced/Invention); F16K17/04 H01M2/04 H01M2/10 H01M2/12 H01M2/20 (Core/Invention)

International class (IPC 1-7): F16K17/04 H01M1/04 H01M43/04

CPC: Y10S224/902 H01M2/10 H01M2/1223 H01M2/04 H01M2/1022 H01M2/12 H01M2/1229 H01M2/34 Y10T137/7062 Y10T292/1082 Y10T292/212 F16K17/0446 Y10T137/7838 Y10T137/7879 Y10T137/86324

European class: F16K17/04H H01M2/04 H01M2/10 H01M2/10C2 H01M2/12 H01M2/12C H01M2/34 T01M2/12C2 Y02E60/12

US class: 137/382 137/512 137/587 137/843 215/274 220/203.02 224/235 224/675 224/679 224/902 251/335.2 292/201 292/256.65 429/100 429/184 429/55

Classification Explorer

Cited documents: US881234 A, US506928 A, US375748 A, US298143 A, US2404777 A, US2318371 A, US2234673 A, US2215076 A, US2190601 A, US2179393 A, US2109137 A, US1871043 A, US1806477 A, US1800066 A, US1792280 A, US1765027 A, US1756072 A, US1642010 A, US1589074 A, US1527624 A, US1449940 A, US1440690 A, US1417430 A, US1398845 A, US1376109 A, US1368315 A, US1353540 A, US1089754 A, GB191200078 A, FR671146 A, FR642596 A, FR636652 A,

Forward Citations: WO16026051, WO11126769, US8597808, US8591242, US6892401, US6742550, US5263853, US5004129, US4599283, US4046295, US3791875, US3364845, US3028993, US2845090, US2718424, US2671819, US2670396, US2658938, US2011225737, EP2450982, EP2450982,

Abstract:

Source: GB668102A 668,102. Accumulators. TRIGGS, W. W. (Edison, Inc., T. A.). Jan. 4, 1950, No. 192/50. Class 53. [Also in Group XXV] An accumulator which may be of the nickel iron type and particularly for use with lamps in mines is provided with a pair of terminals for the output to the lamp and a second pair for charging. The terminals are mounted on the lid of the casing and are enclosed in a second hinged **cover** which when closed connects the battery to the output terminals. The **cover** is provided with a magnetic lock and when this is released by a magnet a spring causes the **cover** to **open** sufficiently to expose the charging terminals, the circuit to the output terminals being simultaneously interrupted. The partial **opening** of the **cover** is limited by a catch which can be released manually to enable the **cover** to be fully **opened** if access is required to all the terminals, filling **openings**, gas vents and c. As shown in Fig. 7, the casing 10 of the accumulator is divided by a partition 11 into two compartments 12, 13 in each of which are two cells 14, 15, the **containers** of the cells 14 constituting negative terminals and the **containers** of the cells 15 being positive terminals. The **containers** of the two cells in each compartment are joined together so that the cells are in series, and the two cells in one compartment are connected in series with those in the other compartment by means of a strap 19. One terminal 22 of the battery is connected by a strap 20 to the terminal post 14a of one cell, another terminal 22b being connected through a conductor 28 to a strap 21 connected to the post 15a of a cell in the second compartment. The terminals 22, 22b are provided with upstanding blades 29, 30, Fig. 2, which constitute the charging terminals of the battery. A separate pair of output terminals 23, 23a are connected to the strap 21 and a conductor 31 leading to a terminal 22a which can be connected to the terminal 22 through a switch, the fixed contacts of which are formed by an arm 29a on the blade 29 and a contact 49 secured to the terminal 22a as shown in Fig. 3. The casing 10 is provided with a hinged **cover** 60 which carries a U-shaped spring 85 which when the **cover** is closed bridges the contacts 29a, 49, thus completing the circuit to the output terminals and cable 32. The spring 85 also serves as a catch by engagement with a fixed lug 84 to prevent the **cover** from **opening** beyond a point sufficient to expose the charging terminals 29, 30. The spring and lug can be disengaged by a screwdriver or other tool when it is desired to **open** the **cover** fully. The **cover** is biased to the **open** position by a spring 62 and encloses the terminals, gas vents and other fittings on an inner lid 33 of the battery casing. When the **cover** 60 is closed it is automatically looked by a magnetic look comprising two soft iron posts 72 carried by the **cover** and supporting a non- magnetic plate 73 having **openings** 74 for receiving iron pawls 64, Fig. 8. These pawls are pivoted at 66 to a casing 65 and are urged together by springs 67. The casing 65 is housed in a recess 68 in a wall 44 projecting upwardly from the lid 33. When the **cover** 60 is closed the centre part of the plate 73 forces the pawls apart and they then snap into the **openings** 74. The pawls are released by the application of a horseshoe magnet to the **cover** 60. The inner lid 33 is held in place by two bands 38, the upper turned-in portions 38b of which engage the lid, shoulders 38a on the bands engaging corresponding shoulders on the case. The ends of the bands are turned inwardly to form hooks 38c which project into recesses 37 formed in the sides of the case. The hooks 38c diverge upwardly as shown in Fig. 2, and are engaged by diverging hooks 39a formed on clamps 39 situated in the recesses 37 so that the ends of the bands are drawn tightly together. Ears 39b on the clamps are bent across the adjacent edges of the bands to hold them in place. The case is provided with brackets 41 to receive belt straps. Each cell of the battery is provided with a filling **opening** 18 in which is fitted a gas vent, Fig. 6, having two valve-controlled exits 95, 96, one of which **opens** at a lower pressure than the other. Each vent comprises a tube 91 having side **openings** 95, 96 situated. on opposite sides of a diaphragm having a central **opening** 99 which can be closed by a valve 102 when pressure is applied to a plunger 101. The **openings** 95, 96 are normally, closed by a rubber sleeve 97, the thickness of which is less where it **covers** the **opening** 95 than where it **covers** the **opening** 96. In the position of the parts shown in Fig. 6, gas has access to both **openings** 95, 96 and the thinner rubber surrounding the **opening** 95 allows the gas to escape, the **opening** 96 remaining closed. When the plunger 101 is pressed down to close the valve 102 the gas is cut off from the **opening** 95 and the pressure builds up till it causes the gas to escape through the **opening** 96. The plunger 101 is actuated by the **cover** 60 which when closed presses the plunger down to close the valve 102. When the **cover** is **opened** for charging purposes the plunger rises and gas can escape at low pressure through the **opening** 95. Specification 660,083 is referred to.

PatBase - US2635628_A

April 21, 1953 W. Y. STAMPER 2,635,628

RELEASE VALVE

Original Filed Jan. 29, 1946

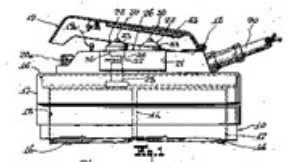


Fig. 1

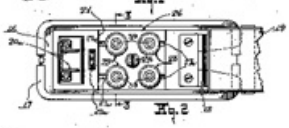


Fig. 2

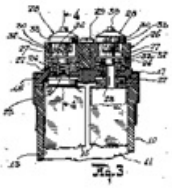


Fig. 3

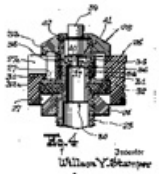


Fig. 4

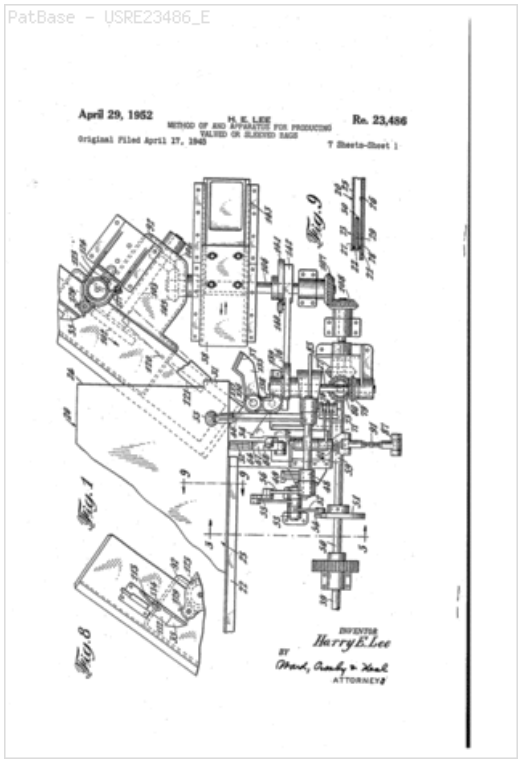
Inventor
William Y. Stamper

33) Family number: 24057228 (USRE23486E)

Family:	Publication number	Publication date	Application number	Application date
	USRE23486 E	19520429		00000000

International class (IPC 8-9):	B31B19/84 (Advanced/Invention); B31B19/00 (Core/Invention)
CPC:	B31B70/85 B31B70/00 B31B2160/10
European class:	B31B19/84 L31B219/90J4
US class:	493/213 493/220
Classification Explorer	
Forward Citations:	US2740334, US2708392, US2677319,

Abstract:
Source: USRE23486E 1. In forming a sleeve valve **bag**, the steps which comprise separating the walls of the **open** end of a **bag** adjacent one corner of the **bag**, introducing between the separated walls a spreader and moving the spreader in a diagonal direction into the **bag** until the corner of the **bag** is substantially straightened against the spreader, applying to the outside of the straightened corner a sheet adapted to form a sleeve, thereafter withdrawingthe spreader while holding the sheet in position and then folding the sheet and straightened corner about a median line and collapsing the spread apart walls against the folded in sheet and corner.



34) Family number: 19908138 (GB675534A)

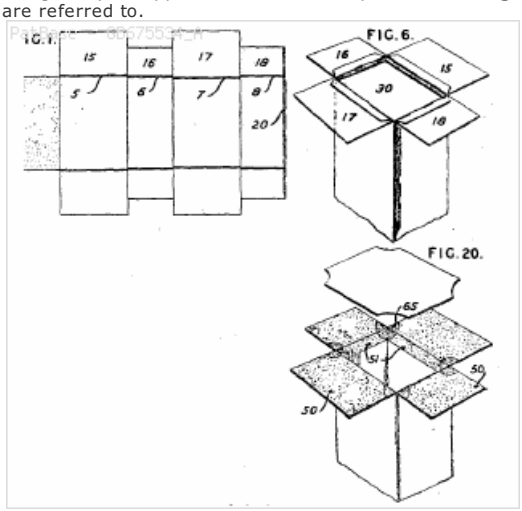
Title:	Improvements in or relating to a castor or like **container** and method of making the same
Priority:	GB19500000302 19500105

Family:

Publication number	Publication date	Application number	Application date
GB675534 A	19520709	GB19500000302	19500105

Probable Assignee:	MARATHON CORP
Assignee(s):(std):	MARATHON CORP
International class (IPC 8-9):	B65D5/02 (Advanced/Invention); B65D5/02 (Core/Invention)
International class (IPC 1-7):	B65D31/10 B65D5/56
CPC:	B65D5/0272
European class:	B65D5/02H
Classification Explorer	
Forward Citations:	US4838430,

Abstract:
Source: GB675534A 302/50. Classes 18 and 94(i) A tubular polygonal carton, e.g. for liquids, powder or granular materials, is closed and **sealed** at one or both ends by a flexible membrane 30, Figs. 6 and 20, that is depressed or shaped into traylike form in situ and has its upstanding portions secured to the inner faces of the carton walls by heat and pressure. The carton may be formed from a blank, Fig. 1, having a grease-proof and moisture-proof composition 20 applied to one edge to prevent the carton stock acting as a wick for oily or greasy contents and having end flaps 15, 16, 17, 18 that are folded over the membrane and **sealed**. Alternatively, the flaps 15, 17 may be formed with interengageable tongues and slots, Fig. 17 (not shown), so that the **package**, e.g. when containing powder, may be reclosed and the membrane may be punctured by the user for **dispensing** purposes. The score or hinge lines 5, 6, 8, and 7 of the end flaps are located in stepped or offset relation in the same sequence as the flaps are to be folded. The membrane 30 may be of paper, cellulose film, thermoplastic or wax-rubber film or film of vinyl acetate or vinyl chloride and it may be coated with a rubber and wax composition, aluminium stearate compositions, polyamid resins, ethyl cellulose or rubber hydrochloride. The carton may be lined with paper, metal foil, rubber hydrochloride or regenerated cellulose and the inner face may be coated with heat-**sealable** thermoplastic material and with grease-proof and moisture-proofing agents. Alternatively, the **closure** flaps may have a heat-**sealable** composition or coating 50, Fig. 20, the carton may be provided with coating 51 at specific areas and additional coatings may be applied at 65 to ensure positive **sealing** at the corners. Specifications 481,426 and 617,145, [both in Group VIII], are referred to.



35) Family number: 22636873 (US2603046A)

Title:	METHOD OF MAKING AIRTIGHT MOISTUREPROOF CLOSED **CONTAINERS**
Priority:	US19450630224 19451123 US19470766561 19470806

Family:

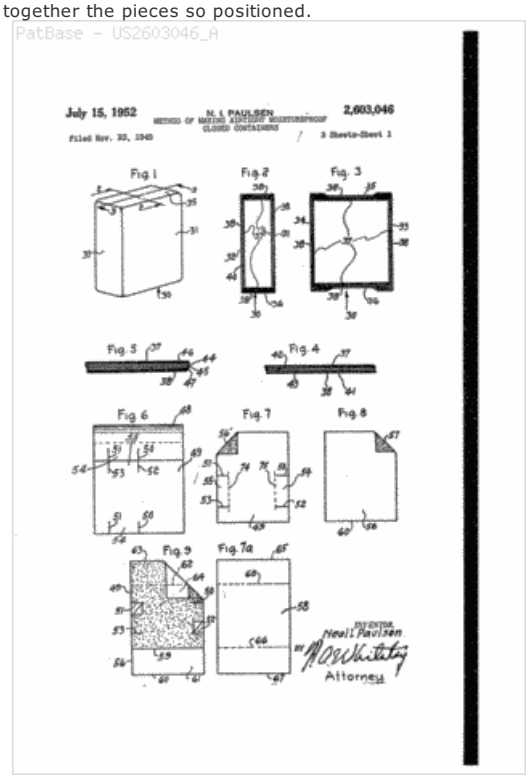
Publication number	Publication date	Application number	Application date
US2603046 A	19520715	US19450630224	19451123
US2658662 A	19531110	US19470766561	19470806

Probable Assignee:	REYNOLDS METALS CO
Assignee(s):(std):	REYNOLDS METALS CO
Assignee(s):	REYNOLDS METALS COMPANY
Inventor(s):(std):	PAULSEN NEAL I
International class (IPC 8-9):	B65D65/40 B65D75/26 (Advanced/Invention); B65D65/40 B65D75/26 (Core/Invention)
International class (IPC 1-7):	B65D5/26 B65D5/40 B65D5/56 B65D5/62 B65D81/34
CPC:	B65D75/26 Y10S229/923 B65D65/40
European class:	B65D65/40 B65D75/26
US class:	156/306.6 229/125.37 229/132 229/164.1 229/164.2 229/5.82 229/923 493/111 53/456 53/482

Classification Explorer

Cited documents:	US536604 A, US481485 A, US2442936 A, US2438981 A, US2429588 A, US2400390 A, US2372452 A, US2326649 A, US2311733 A, US2307902 A, US2293568 A, US2252462 A, US2223754 A, US2166389 A, US2152323 A, US2128739 A, US2003494 A, US1988520 A, US1983870 A, US1958256 A, US1135878 A,
Forward Citations:	US5102006, US4244492, US4122324, US3877630, US3724741, US3156401, US3137432, US3088646, US3087491, US3084882, US3069825, US2959335, US2954912, US2944715, US2858970, US2848151,

Abstract:
Source: US2603046A (Claim 1) 1. A step of the method of making air-tight moisture-proof **containers**, which consists in forming two sheets of metal foil of the same length and width, forming a sheet of heat-**sealing** material of the same width but of greater length than the sheets of foil, and positioning the said foil sheets upon the heat-**sealing** material at opposite sides thereof and with an end of each respectively coming to an edge of the heat-**sealing** material, thus leaving exposed bands of heatsealing material at opposite sides and ends of the combined sheet, and securing together the pieces so positioned.



36) Family number: 19866822 (GB681096A)

Title:	Improvements in or relating to **bag** arrangements

Family:

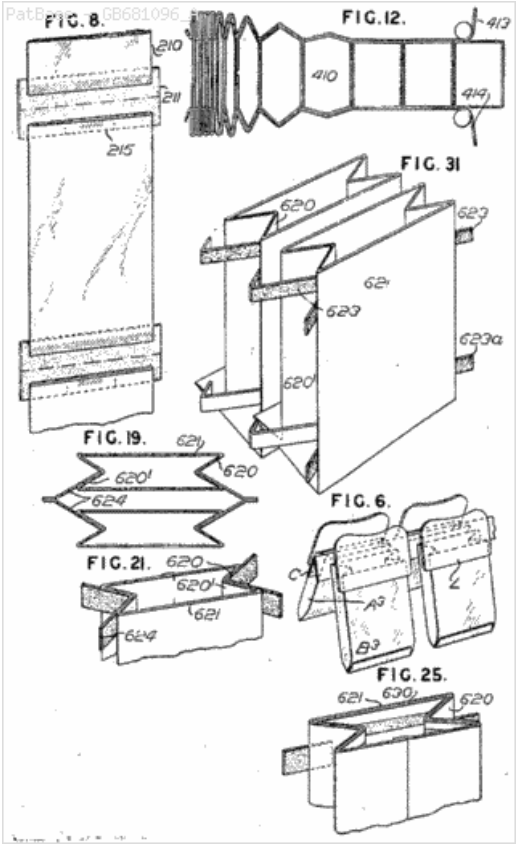
Publication number	Publication date	Application number	Application date
GB681096 A	19521015	GB19490013822	19490524

Probable Assignee:	CLARENCE WEDEKIND VOGT
Assignee(s):(std):	CLARENCE WEDEKIND VOGT
International class (IPC 8-9):	B65B43/12 (Advanced/Invention); B65B43/00 (Core/Invention)
International class (IPC 1-7):	B29C24/00 B65B43/12
CPC:	B65B43/123
European class:	B65B43/12B
Classification Explorer	
Forward Citations:	WO10054692, WO07081272, USD709129, USD708666, US9446872, US9284082, US8006734, US7837815, US5210993, FR2665136, EP2555983, EP0487788, EP0468865, DE3509181, DE1207259, AU652166,

Abstract:

Source: GB681096A 681,096. Paper and like **bags**; **packaging**. VOGT, C. W. May 24, 1949 [June 2, 1948; July 13, 1948; Sept. 4, 1948; Sept. 23, 1948; Sept. 30, 1948; Dec. 23, 1948; Jan. 14, 1949; March 5, 1949], Nos. 13822/49, 13823/49, 13824/49, 13825/49, 13826/49, 13827/49, 13828/49 and 13829/49. Classes 94(i) and 94(ii) A plurality of separate **open**-mouth **bags** are interconnected by elements having coatings of thermoplastic, pressure-sensitive or self-sticking adhesive means, not forming an integral part of the **bags**, at at least one point of each **bag** adjacent its **open** mouth and permitting the mouth of the **bag** to be **opened** when supported for filling. Fig. 6 shows a chain of **bags** arranged in pairs A^3. B^3 on opposite sides of a support-engaging strip C of inverted V section, the free edge of each **bag** mouth having an adhesive-coated **sealing** **label** L. During filling operations the **label** L may engage guides and cause **opening** of the **bags** as they approach the filling point. In alternative arrangements the **labels** L are omitted and the outer faces of each row of **bags** are interconnected by one or more elongated tapes. Fig. 8 shows a chain of **bags** 210 connected end-to-end by transverse adhesive-coated strips 211 which may be cut centrally after the filling operation to **seal** the mouth of one **bag** and reinforce the bottom of the preceding **bag**. The lower edge of each strip may have an area free from adhesive to allow a portion 215 extending wholly or partly along the strip to be bent outwardly to engage a support member. In an alternative arrangement the **bags** may be connected directly back-to-back in pairs, the pairs being connected end-to-end by strips running longitudinally of the **bags** on their outer faces and adhered thereto so that they may be peeled off as each pair is **opened** and filled. In a further arrangement the **bags** may have mouth flaps whereby the end-to-end chain may be formed, and two such chains may be arranged with the **bags** back-toback in pairs, the **bags** of each pair being spacedly connected by Z-shaped support-engaging strips. Fig. 12 shows a chain of **bags** 410 having out-folded sides which are interconnected by adhesive-coated zigzag tapes 413, 414 arranged so that tension applied thereto causes the **bags** to **open** as they approach the filling point, the tapes being peeled from the **bags** after filling. The arrangement may be applied to **bags**.with infolded gusset sides, and also to **bags** having thermoplastic linings. The **bags** may be spaced in the chain and the tapes arranged to project above the **bag** mouths so that severing of the tapes intermediate the **bags** will leave each **bag** with mouth-**sealing** tapes. In alternative arrangements **bags** may be connected with their plain faces adjacent each other by transverse strips bent to inverted V form. Fig. 19 shows a pair of gusseted **bags** 621, each having the gusset walls 620^1 provided with a connecting **tab** 624. For chain formation the **tab** may extend beyond both gusset walls 620, 620^1 on each side of the **bag** as in Fig. 21. Various arrangements of the adhesive coatings on the **tabs** are described whereby they may be used for subsequent **sealing** of the **bags** after filling. Fig. 25 shows a tabbed and gusseted **bag** having a reinforcing strip 630 stuck to the inside of the **bag** mouth, the strip 630 having its lower inwardly facing surface adhesive-coated so that **sealing** of the **bag** mouth thereby will leave the upper edge of the mouth free to facilitate subsequent **opening**. In making such **bags** from a single web or seamless tube the **tabs** and strips may be secured in position before the gusset folds are made. For square-bottomed **bags** as in Fig. 31 **tabs** 623 and 623a may be arranged on the gusset walls at the top and bottom respectively of the **bag** so that tension applied to a chain of such **bags** will cause complete **opening** of the **bag** throughout its length. In a further arrangement a chain of gusseted **bags** may be formed by sticking together adhesivecoated **tabs** struck from the material of one or both gusset walls on each side of the **bag**. The Specification as **open** to inspection under Sect. 91, comprises also arrangements of **bags** in pairs or chains by means of integral connections therebetween or by means of adhesive coatings directly on integral parts of the **bags** near their mouths. This subject-matter does not appear in the Specification as accepted.

PatBase GB681096



37) Family number: 19911920 (US2621756A)

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Title:	FILTER REPLACEMENT MECHANISM FOR VACUUM CLEANERS
Priority:	19480218 US19490068953 19490103

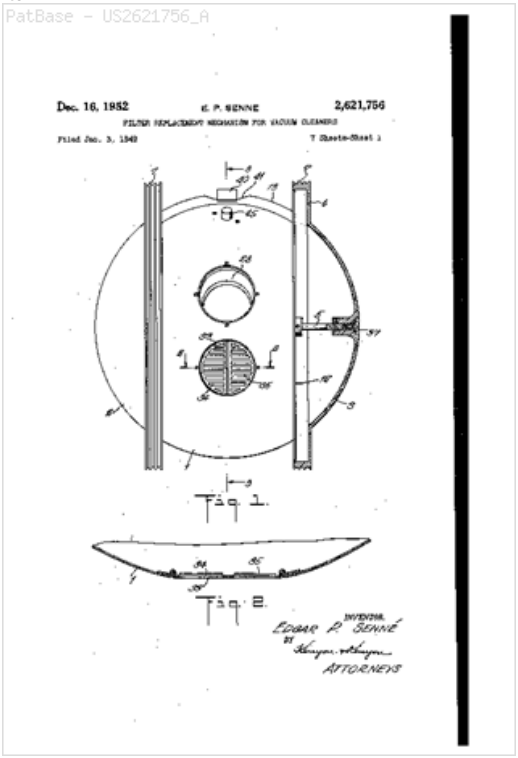
Family:

Publication number	Publication date	Application number	Application date
GB682845 A	19521119	GB19490003305	19490207
GB682940 A	19521119	GB19510019679	19490207
US2621756 A	19521216	US19490068953	19490103

Probable Assignee:	ELECTROLUX AB
Assignee(s):(std):	EDGAR PETER SENNE ; ELECTROLUX AB ; ELECTROLUX CORP
Inventor(s):(std):	SENNE EDGAR P
International class (IPC 8-9):	A47L9/00 A47L9/10 A47L9/19 (Advanced/Invention); A47L9/00 A47L9/10 (Core/Invention)
International class (IPC 1-7):	A47L9/10
CPC:	A47L9/00 A47L9/19
European class:	A47L9/00 A47L9/10 A47L9/19
US class:	15/319 15/327.4 15/339 55/356 55/362 96/398
Classification Explorer	
Cited documents:	US996810 A, US2580645 A, US2169656 A, US1100940 A, US1096814 A,
Forward Citations:	WO13190311, WO12116436, US9801511, US9693666, US9609990, US9609986, US9516982, US9451852, US9392917, US9370286, US9301663, US9301662, US9160255, US9101252, US9015899, US8978198, US8973214, US8973212, US8869345, US8813306, US8769767, US8763202, US8739359, US8739357, US8646149, US8528160, US8105409, US8048186, US7380308, US3015122, US2918693, US2892511, US2789660, US2781103, US2779432, US2778447, US2737262, US2015320271, US2012222263, US2012222242, US2012222241, US2012222239, EP1656871,

Abstract:

Source: GB682845A 682,845. Suction cleaners. ELECTROLUX CORPORATION. Feb. 7, 1949 [Feb. 18, 1948; Jan. 3, 1949], Nos. 3305/49 and 3306/49. Class 8 (i) and 8 (ii). A suction cleaner or an air filter apparatus comprises a filter **bag**, 23 Fig. 3, removably mounted in an upwardly spring-biased **opening** and closing member 16 mounted in a compartment 9 and having releasable latch and other means e.g., a latch 43 and bolt 42 responsive to a predetermined filled condition of the **bag** 23 for automatically releasing said means to permit **opening** of said member 16. This **bag** receiving member is hinged at a pin 17 to the cleaner shell 13 and is biased upwardly by a spring 44 to indicate clogging of the **bag** 23 on the automatic withdrawal of the bolt 42 following energisation of an electromagnetic relay 56', Fig. 7. The armature of the relay 56' is operatively connected to a bolt actuator 46 through a rod 59, and a lever 57 which on retraction of the armature depresses a lever 47 to raise the actuator 46 and thus release the bolt 42; the relay being energised on closing a switch 62 actuated by a pressure responsive bellows 63 in the filter compartment 9, or by distention of the **bag** 23. Manual actuation of the actuator 46 and hence of the bolt 42 is effected by a push-button 45 operatively connected to a cam 55 and to levers 49, 48, 47 Fig. 8. As shown the **bag** receiving member is applied to a cleaner which is readily propelled along the floor on two wheels by force applied by the operator to the suction hose as described in Specification 645,847. In a modification the cleaner is mounted on three wheels to assist portability, or alternatively it rests on the floor. Specification 682,940/51 also is referred to.



38) Family number: 22555105 (US2775082A)

Title:	Method of filling and **sealing** **bags**
Priority:	US19480030647 19480602 US19520318171 19521101

Family:

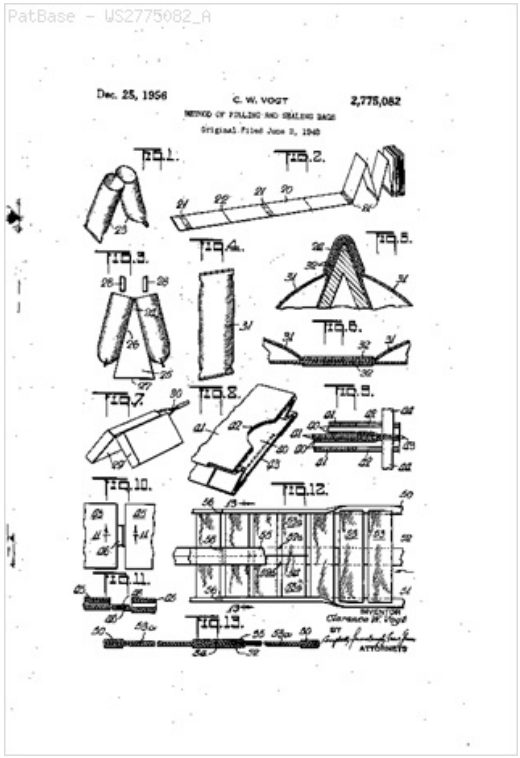
Publication number	Publication date	Application number	Application date
US2628013 A	19530210	US19480030647	19480602
US2775082 A	19561225	US19520318171	19521101

Probable Assignee:	VOGT CLARENCE W
Assignee(s):(std):	VOGT CLARENCE W
Inventor(s):(std):	VOGT CLARENCE W
International class (IPC 8-9):	B65B7/02 B65D30/00 B65D75/44 (Advanced/Invention); B65B7/00 B65D30/00 B65D75/00 (Core/Invention)
International class (IPC 1-7):	B65B7/02 B65D75/42
CPC:	B65B7/02 B65D75/44 Y10S206/82 B65D31/00
European class:	B65B7/02 B65D31/00 B65D75/44
US class:	206/820 229/69 383/37 493/195 493/210 53/469 53/477

Classification Explorer

Cited documents:	US900751 A, US633790 A, US2565444 A, US2430995 A, US2409998 A, US2401110 A, US2344369 A, US2333643 A, US2312280 A, US2224753 A, US2195740 A, US2154083 A, US2028341 A, US2027643 A, US2015972 A, US2013844 A, US1955563 A, US1940221 A, US1939704 A, US1881890 A, US1315696 A, GB196011 A, GB191414224 A, FR820236 A, AT133376 B, AT133376,
Forward Citations:	US8156713, US7011615, US6827490, US5698056, US5226858, US4795271, US4305503, US3931886, US3749237, US3490680, US3331182, US3254828, US3246803, US3242630, US3199671, US3119548, US3082583, US3081234, US3060655, US3060075, US3057472, US3053428, US3051605, US3033257, US3027065, US2973127, US2925694, US2714557, US2008041020, US2003021500,

Abstract:
Source: US2775082A (Claim 1) 1. The method of **packaging** and **sealing** materials which consists of providing a, sepai-ate pair of ba.-S in which each **bag** has closed sides, a closed end and an **open** opposite end, connecting said pair of ba.-S at opposinsides thereof at their **open** ends only, suspending and siipportin- said pair of **bags** at said conn-,ction so that the **open** ends are uppermost, p-oviding thermoplastic -_naterial: on the inner surfaces of said, **bags** _ at their **open** ends, fillin.- said **bags** while so supported, pressing the opposile walls of both **bags** together at their **open** ends to close thei-n, and heatinboth **bags** at. their **open** ends to Simultaneously scal,both **bags**.,



39) Family number: 29389332 (US3870518A)

Title: Method of transferring photographic film between cassette and an exposure drum

Priority: DE1950N001741 19500901 DE19722209515 19720229 US19500169387 19500621 US19740488254 19740712 US19730335956 19730226

Family:

Publication number	Publication date	Application number	Application date
BE496518 A	00000000		00000000
BE796102 A	19730618	BE19730128222	19730228
CH316198 A	19560930		19500620
CH551636 A	19740715	CH19730002568	19730222
DD103972 C	19740212	DD19730169055	19730226
DE2209515 A1	19730913	DE19722209515	19720229
DE2209515 B2	19750213	DE19722209515	19720229
DE2209515 C3	19751009	DE19722209515	19720229
DE975265 A	19611026	DE1950N001741	19500901
FR1026755 A	19530504		19500621
FR2174625 A5	19731012	FR19730007192	19730228
GB1419827 A	19751231	GB19730009578	19730227
GB737864 A	19551005	GB19490016592	19490622
IT977901 A	19740920	IT19730067501	19730227
JP48101129 A2	19731220	JP19730024185	19730228
JP52042086 B4	19771022	JP19730024185	19730228
JP913677 C3	19780721	JP19730024185	19730228
NL154335 B	00000000		00000000
NL7302160 A	19730831	NL19730002160	19730215
NL94419 C	00000000		00000000
SE388292 B	19760927	SE19730002327	19730220
SE388292 C	19770113	SE19730002327	19730220
SU470128 D	19750505	SU19731885934	19730223
US2796218 A	19570618	US19500169387	19500621
US3870518 A	19750311	US19730335956	19730226
US3935584 A	19760127	US19740488254	19740712
YU277578 A	19791031	YU19780002775	19781127
YU34943 B	19800430	YU19780002775	19781127
YU34944 B	19800430	YU19730000455	19730222
YU45573 A	19791031	YU19730000455	19730222

Probable Assignee: HELL RUDOLF GMBH

Assignee(s):(std)**:** DR ING RUDOLF HELL GMBH KIEL BONDSREPUBLIEK DUITS ; HELL RUDOLF GMBH ; HELL RUDOLF DR ING GMBH ; HELL GMBH DR INGRUDOLF ; HELL R GMBH ; NAT RES DEV ; IBM ; FELS WERNER

Assignee(s): DR ING RUDOLF HELL GRENZSTRASSE 1 5 23 KIEL 14 ALLEMAGNE GMBH ; NATIONAL RESEARCH DEVELOPMENT CORP ; RUDOLF HELL GMBH ; HELL GMBH DR ING RUDOLF ; HELL GMBH DR ING RUDOLF DT ; INT BUSINESS MACHINES CORP ; LINOTYPE HELL AG ; DR ING RUDOLF HELL GMBH KIEL BONDSREPUBLIEK DUITSL ; DR ING RUDOLF HELL GMBH KIEL BONDSREPUBLIEK DUITSLAND ; DR ING RUDOLF HELL GRENZSTRASSE 1 5 23 KIE GMBH ; DR ING RUDOLF HELL GMBH ; DR ING RUDOLF HELL GMBH 2300 KIEL

Inventor(s):(std)**:** FELS WRNER ; FREDERIC CALLAND WILLIAMS ; GEOFFREY COLIN TOOTILL ; GEORGE EDWARDS DAVID BEVERLEY ; GORDON ERIC THOMAS ; KILBURN T ; KILBURN TOM ; THOMAS G E ; THOMAS GORDON ERIC ; TOM KILBURN ; TOOTILL G C ; TOOTILL GEOFFREY C ; TOOTILL GEOFFREY COLIN ; WERNER FELS ; WILLIAMS F C ; WILLIAMS FREDERIC CALLAND ; WRNER FELS ; EDWARDS D B G ; EDWARDS DAVID BEVERLEY GEORGE ; ERIC THOMAS GORDON ; FELS W ; FELS WERNER ; BEVERLEY GEORGE EDWARDS DAVID ; CALLAND WILLIAMS FREDERIC

Inventor(s): COLIN TOOTILL GEOFFREY ; FELS WERNER 2300 KIEL

International class (IPC 8-9): B41B21/32 B65H19/22 G03B27/14 G03B27/22 G03F1/00 G03F9/00 G06F3/06 G11B7/00 (Advanced/Invention);
B41B21/00 B65H19/22 G03B27/02 G03F1/00 G03F9/00 G06F3/06 G11B7/00 (Core/Invention)

International class (IPC 1-7): B41B21/32 G03B1/00 G03B17/26 G03B27/00 G03B27/14 G03B27/32 G03B27/52 G03B27/58 G03C5/04 G03F3/04 G03F7/20 G06F9/00 G11B7/00 G11C15/00 G11C7/00

CPC: G03B27/22 G06F3/0601 G06F2003/0692

European class: G03B27/22 G06F3/06A S06F3/06D

US class: 354/214 355/104 355/75 355/77 358/302 358/489 396/360 396/367 396/387 396/413 710/61 711/167

Classification Explorer

Cited documents: US3706489 A, US3673943 A, US3653309 A, US362978 A, US3578862 A, US2604262 A, US256966 A, US2540654 A, US2017096 A, US1998324 A,

Forward Citations: WO9107842, WO9103121, WO9103120, US5369425, US5355156, US5329301, US4933779, US4770404, US4733309, US3784983, US3431558, US3427592, US3245039, US3036773, US3034720, US3027081, US3026036, US3024993, US2962213, US2951296, US2951295, US2934262, US2924381, US2902675, JP61105617, JP60150717, JP58096536, JP58096535, JP57115265, JP3042434, EP0362980, DE1178623, DE1167569, DE1099225, AU629974, AU629973,

Abstract:
Source: US3870518A A method of handling film before and after exposure comprising mounting unexposed film in a cassette, mounting the cassette on a housing of exposure reproduction apparatus having therein a rotary film carrying drum, shifting a **closure** on the cassette to effect communication between the interior of the housing through an access **opening** therein, transferring the film from the cassette through the **opening** into engagement with the drum and rotating the drum to withdraw the film from the cassette. The film is then exposed while on the drum, the drum reversed and the film returned into the cassette, the cassette closed and then removed from the housing.

PatBase - US3870518_A

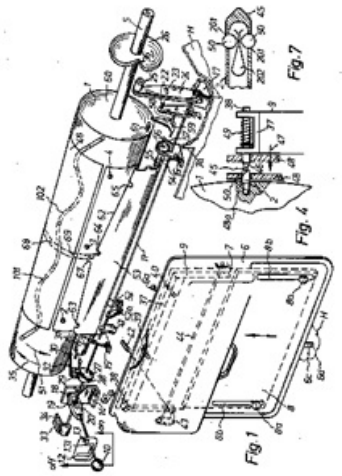


Fig. 7

Fig. 4

Fig. 1

40) Family number: 21688519 (US2641882A)

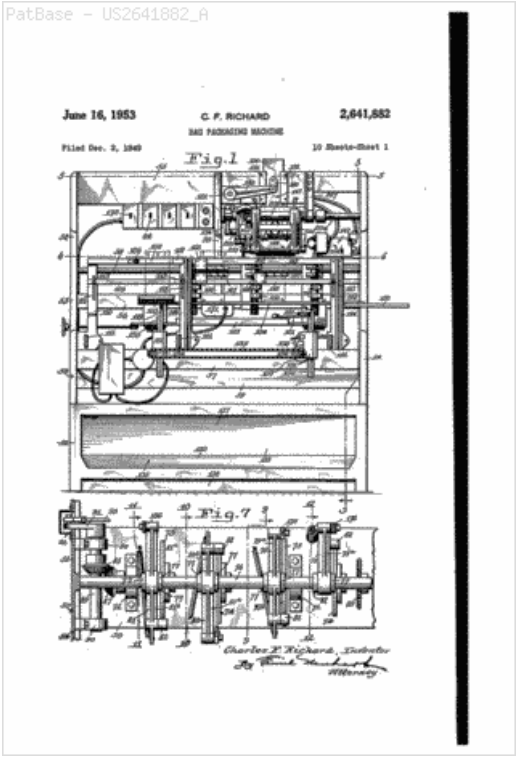
Title:	BAG PACKAGING MACHINE
Priority:	US19490130620 19491202

Family:

Publication number	Publication date	Application number	Application date
US2641882 A	19530616	US19490130620	19491202

Probable Assignee:	NIAGARA PACKAGING MACHINERY CO
Assignee(s):(std)**:**	NIAGARA PACKAGING MACHINERY CO
Assignee(s):	NIAGARA PACKAGING MACHINERY CORP
Inventor(s):(std)**:**	RICHARD CHARLES F
International class (IPC 8-9):	B65B7/08 (Advanced/Invention); B65B7/00 (Core/Invention)
International class (IPC 1-7):	B65B7/08
CPC:	B65B7/08
European class:	B65B7/08
US class:	493/209 53/167 53/371.7 53/371.9 53/372.2
Classification Explorer	
Cited documents:	US787696 A, US2523968 A, US2287957 A, US2257777 A, US2011198 A, US1986043 A, US1979496 A, US1772824 A, US1631125 A,
Forward Citations:	WO03000554, US4071999, US3861124, US3279150, US2976660, US2925699, US2766571, EP0461090, DE1209934,

Abstract:
Source: US2641882A (Claim 1) 1. In a. bag closing machine,



41) Family number: 21775063 (US2642707A)

Title:	PACKAGE WRAPPING MACHINE
Priority:	US19490073489 19490129

Family:

Publication number	Publication date	Application number	Application date
US2642707 A	19530623	US19490073489	19490129

Probable Assignee:	LYNCH CORP
Assignee(s):(std):	LYNCH CORP
Inventor(s):(std):	OSCAR SANDBERG
Inventor(s):	SANDBERG OSCAR
International class (IPC 8-9):	B65B11/32 B65B11/42 B65B23/18 (Advanced/Invention); B65B11/06 B65B23/00 (Core/Invention)
CPC:	B65B11/32 B65B11/42 B65B23/18
European class:	B65B11/32 B65B11/42 B65B23/18
US class:	53/136.1 53/225 53/371.9 53/381.1 53/74
Classification Explorer	
Cited documents:	US2397190 A, US2195222 A, US2081626 A, US2066414 A, US1984850 A, US1791171 A, US1508637 A, US1368780 A,
Forward Citations:	US5946884, US5775479, US4208854, US3537232, FR2534223, EP0913327, EP0737618, EP0165204, EP0137480, EP0137480, EP0137480,

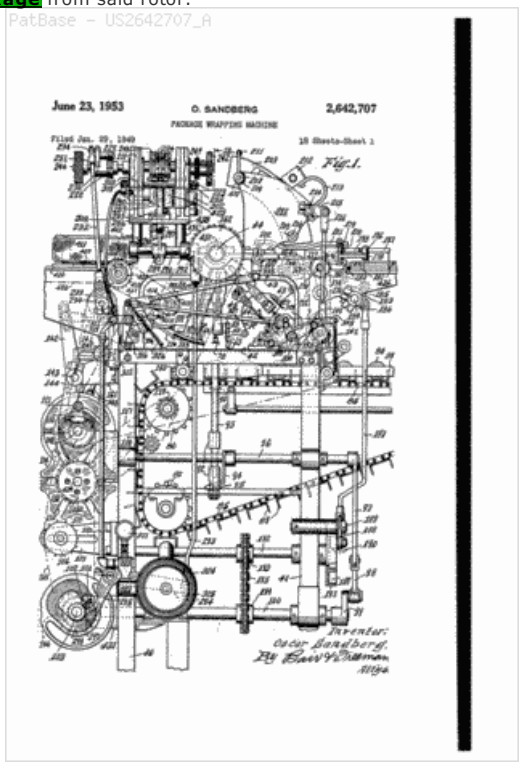
Abstract:
Source: US2642707A I claim as my invention: 1. In a' wrapping machine a rotor having a plurality of axially elongated article receiving pockets therearound having **open** ends' and an **open** outer side, each of said pockets having a movable article gripping member, means for imparting intermittent rotation to said rotor- to move the pockets thereofss to successive stations each cycle oi' operation of the wrapping machine, an article carrying conveyor adapted to receive articles to be wrapped and to convey them to one of said stations, a ram at said station for moving the articles from the successive pockets of said conveyor and a wrapper therefor into the **open**' sides of said -pockets of said rotor. means to move the article gripping member of a rotoxipocket receiving an article and wrapper, to a position for reception of the article and wrapper, each pocket of said rotor having radially movable iirst end Iiap' folder blades at the **open** ends of the pocket which are retained against movement as the article is moved by said ram into a pocket of the rotor, anarcuate first circumferential Hap folder swingable' on the shaft of said rotor across the **open** outer side of the pocket, stationary arcuate iiap folder ilngers adjacent the periphery of said rotor and extending from adjacent the station thereof that receives the article to adjacent the. next station, thereof, a heater shoe located at a_ station of said rotor beyond the ends of said lingers, a rock arm carrying said heatershoe, means for swinging said rock arm for moving said heater shoe toward the rotor while it is stationary, reciprocably mounted second end flap folder blades at the **open** ends of said pockets and positioned at another station of said rotor, means for moving said last blades inwardly of said rotor, projections eneageable with said first end flap folder blades to move them out of the way of said second end iiap folder blades, said projections being movable simultaneously with said second end flap folder blades, third end nap folder blades at the **open** ends oi' said pockets, means for mounting said last blades for rotary Wiping movement over said second' end iiap 'folder blades, stationary arcuate shoes constituting fourth and nap folders at the **open** ends of said pockets as said rotor is further rotated, said shoes being spaced farther apart ' at their ends where the article and wrapper enter between them than at their other ends, said other ends being resiliently biased toward each other; said shoes including heaters for the ends of a wrapped **package** as the rotor is advanced and during the time it is stationary with a **package** intermediate the ends of said arcuate shoes, a second rock arm, a heater carried thereby and engageable with' said circumferential flaps While the **package** is at said last station, means for rocking said second rock arm simultaneously with _the rocking of said nrst rock arm, means for checking whether or not there is a **package** at a station beyond said arcuate shoes, said last means comprising a pivoted arm to which movement is imparted each cycle of operation of the wrapping machine, said arm having a part to extend into a pocket of said rotor, **labelling** mechanism comprising a movable head for carrying a **label** to a position against the end of a **package** at the station beyond said. checking means, means for producing a vacuum in saidhead, the- face of said head being perforated in communication with said means to hold a **label** thereon.. means for feeding a strip of **labels** to sa-id head and cutting- alabel oif said strip for each **package**, a clutch mechanism being operated by said checking means to in turn cause operation of said **label** feeding and cutting mech~ anism each time said checking meansdetermines that there is a **package** at said station beyond said arcuate shoes, valve means' for relieving the vacuum in said head when a **label** is being fed by said **label** feeding means to a position in front oi said head, means to mechanically engage thc **label** with said head until said valve is closed and the vacuum is established for holding said labelto said head, said last means being moved outof the way after the vacuum is established and before said head is moved toward the **package**, said head' being floatingly mounted by means of a spring connection for finding; of itself a square seating against the end of the **package**, spring means at the opposite end of the **package** opposing said head, and means for discharging the wrapped and **labelled** **package** from said rotor. 2, In a wrapping machine of the character disclosed, a rotor, said rotor having a plurality of axially elongated article receiving pockets therearound having **open** ends and an **open** outer side, each of said pockets having a movable article gripping member, means for imparting intermittent rotation to said rotor to move the Dockets thereof to successive stations, an article carrying conveyor adapted to receive articles to be wrapped and to convey them to one of said stations, means at said station for moving the articles from the successive pockets of said con~ veyor and a wrapper therefor into the **open** sides of said pockets of said rotor, means to move the article gripping member of a rotor pocket receiving an article and wrapper to a position for reception of the article and wrapper, each pocket of said rotor having radially movable first end flap folder blades at the **open** ends Of the pocket, means to positively move said blades to a position where they effect a first end flap fold on the wrapper, a first circumferential flap folder movable across the **open** side of the pocket. 2. second circumferential Hap folder means adjacent the periphery of said rotor following said one of said stations, a heater shoe located at a station beyond the outlet ond of said last means, means for moving said heater Shoe toward the rotor while it is stationary, second end flap folder blades at the **open** ends of said pockets positioned at another station of said rotor, means for moving said last blades toward said rotor projections engageablc with said first end flap folder blades to move thein out of the way of said second end flap folder blades, said projections being movable simultaneously witli said second end flap folder blades, third end flap folder blades at the **open** ends of said pockets, means for mounting said last blades for rotary wiping movement over said second end flap folder blades, arcuate shoes constituting fourth end Hap folders at the **open** ends of said pockets as said rotor is further rotated, heaters for the ends of a Wrapped **package** as the rotor is advanced and during the time it is stationary with a **package** intermediate the ends of said arcuate shoes, means for checking whether or not there is a **package** at a, station beyond said arcuate shoes, **labelling** mechanism comprising a movable head for carrying a **label** to a, position against the end of a **package** at the station beyond said checking means, means for producing a vacuum in said head, the face of said head being perforated in communication with said means to hold a **label** thereon, means for feeding a strip of **labels** to said head and cutting a **label** oil' said strip for each **package**, clutch mechanism for operating said last means each time it engages a **package** at said station beyond said arcuate shoes, said clutch mechanism being 01:- erated by said checking means, valve means for relieving the vacuum in said head when a **label** is being fed by said **label** feeding means to a position in front of said head, said head being float,- ingly mounted by means of a spring connection for finding of itself a square seating against the end of the **package**, spring means at the opposite end of the **package** opposing said head, and means for discharging the wrapped and **labelled** **package** from said rotor. 3. In a wrapping machine of the character dis- closed, a rotor, said rotor having a plurality of axially elongated article receiving pockets therearound having **open** ends and an **open** outer side, each of said pockets having a movable article gripping member, means for imparting intermittent rotation to said rotor to move the pockets thereof to successive stations, an article carrying conveyor adapted to receive articles to be wrapped and to convey them to one of said stations, means at said station for moving the articles from the successive pockets of said conveyor and a wrapper therefor into the **open** sides of said pockets of said rotor, means, to move the article gripping member of a rotor pocket receiving an article and Wrapper to a position for reception of the article and wrapper, each pocket of said rotor having radially movable first end flap folder blades at the **open** ends of the pocket, means to positively move

said blades to a position where they effect a first end flap fold on the wrapper, a nrst circumferential Hap folder movable across the **open** sido of the pocket, a second circumferemzial flap folder means adjacent the periphery of said rotor following said one of said stations, a heater shoe located at a station beyond the outlet end of said last means, means for moving said heater shoe toward the rotor while it is stationary, second end flap folder blades at the **open** ends of said pockets positioned at another station of said rotor, means for moving said last blades toward the rotor projections engageable with said first end iiap folder blades to move them out of the way of said second end nap folder blades, said projections being movable simultaneously with said second end flap folder blades, third end iiap folder blades at the **open** ends of said pockets, means for mounting said last blades for wiping movement over said second end flap folder blades, arcuate shoes constituting four end Hap folders at the **open** ends or said pockets as said rotor is further rotated, heaters for the ends of a wrapped **package** as the rotor is advanced and during the time it is stationary with a **package** intermediate the ends of said arcuate shoes, means for checking whether or not there is a **package** at a station beyond said arcuate shoes, **labelling** mechanism comprising a movable head for carrying a **label** to a position against the end of a **package** at the station beyond said checking means, means for producing a vacuum in said head, the face of said head being perforated in communication with said means to hold a **label**, thereon, means for feeding a strip of **labels** to said head and cutting a **label** off said strip for each **package**, clutch mechanism for operating said last means, said clutch mechanism being operated by said checking means each time it engages a **package** at said station beyond said arcuate shoes, spring means at the opposite end of the **package** opposing said head, and means for discharging the wrapped and **labelled** **package** from said rotor. 4. In a machine of the character disclosed, a rotor having axially elongated article receiving pockets therearound having **open** ends and an **open** outer side, means for imparting intermittent rotation to said rotor to move the pockets thereof to successive stations, means for moving articles to be wrapped and a wrapper therefor one at a time into the **open** sides of successive pockets of said rotor at a first station, each pocket having radially movable first end nap folder blades at the **open** ends of the pocket, means for closing the **open** side of the pocket, a heater shoe located at a. further station of said rotor, second end flap folder blades at the **open** asummr en;ds’~o£ said pockets, meanaaifastlll further station, of said; rotor for moving" said lastblades inwardly of said rotoifwhile ai pocket thereof is at said still further station, third end flap folder blades at the **open** ends of said pockets, means for mounting said last blades for rotary wiping movement over' said second end nap folder blades; said means for mounting including a slot and Dinconnection and' a rotatable crank for each blade, stationary arcuate shoes constituting fourth endi flap folders at the **open** ends of said pockets as said rotor is, further rotated, said shoes being spaced' farther apart at their ends where the article and wrapper enter between theme than at their other ends, said other ends being resiliently biased toward, each other; said shoes including heaters, means for checking Whetheror not there isa **package** at a station beyond said arcuate shoes, said last means comprising a pivoted arm to which movement is imparted each cycle of operation ofthe wrapping machine, said arm having a part to extend into a pocket of said rotor, **labelling**' mechanism comprising a movable head for carrying a.**label** to a position against the-end of a **package** at the station beyond said checking means, means for producing a vacuum in said head, the face of said head being perforated in communication with said means to' hold a **label** thereon, means for feedinga strip of **labels** to said head and cutting a **label** off said strip for each **package**, a clutch mechanism for operating said last means, said clutch mechanism being operated by said pivoted arm each time it engages a **package** at said station beyond said arcuate shoes, valve means for relieving the vacuum in said head when a **label** is being fed by said **label** feeding means to a position in front of said head, means to mechanically engage the **label** with said head until said valve is closed and the vacuum is established for holding said **label** to said head, said last means being moved` out of the way after the vacuum is established, said head being floatingly mounted for finding of itself a square seating against the end of 'the **package**, spring means at the opposite end of the **package** opposing said head, and means for discharging the wrapped and **labelled** **package** from said rotor. 5. In a machine of the character disclosed; a rotor having axially elongated article receiving pockets therearound having **open** ends and an **open** outer side, means’ for imparting intermittent rotation' to said rotor to move the pockets thereof to successive stations, means for moving articles to be wrapped and a wrapper therefor one at a time into the **open** sides of successive pockets of said rotor as they stop at a first one of said stations, each Docket having radially movable iirst end nap folder blades at the **open** ends of said pockets, means for closing the **open** side of the pocket, a heater shoe located at a station of said rotor for the ends of awrapped **package**, second end flap folder blades at the **open** ends of said pockets, means at a further station of said rotor for moving said last blades inwardlyof said rotor while a pocketthereof is stationary at said further station, third end Iiap folder blades at the **open** ends of said pockets, means for moving said last blades, stationary arcuate shoes constituting fourth end fiap folders at the **open** ends of said pockets as said rotor is further rotated§ said shoes including heaters for the ends of a wrapped **package** as the rotor is advanced, means for checking whether; or not there' is a **package** at a station beyond said arcuate shoes, said last ZZ mBl~DSV0DIHDX‘iSi!1§~ a pivoted ann to which. movement ls' imparted each cycle oi’ operation ofg the wrapping machine, said arm having a part to extend into a pocket of said rotor, **labelling** mechanism comprising a movable head for carrying a **label** to a position against the end of a; packageiat’ the stationgbeyond said checking' means, means for producing a vacuum in said head, the face of said head being perforated in communication with said means to hold a **label** thereon; means forfeeding a strip of **labels** to said head and cutting a **label** off said strip for eachpackage, a clutch mechanism for operating said last' means, said clutch mechanism being operated by said pivoted arm each time it engages a **package** at said station beyond said arcuate shoes, said head being floatingly mounted for finding of itself a square seating against the end of the **package**, spring means at the opposite end of the **package** opposite said head, and means for discharging the wrapped and **labelled** **package** from said rotor. 6. In a wrapping machine of the character disclosed, a. rotor' having Dockets, means for imparting intermittent rotation to said rotor to move the pockets thereof to successive stations, means to Wrap a wrapper around an article in each Docket as said rotor is advanced station to station, and for heat **sealing** the wrapperin relation to the article, means for checking whether or not there is a **package** at ar station beyond said wrapping and heat **sealing** means, said checking means comprising a pivoted arm tg which movement is imparted each cycle of operation of the wrapping machine, said arm having a part to extend into a pocket of said rotor, at said last mentioned station, **labelling** mechanism comprising a movable head' for carrying a **label** to a position against the end of a **package** at the station beyond said checking means, means for producing a vacuum in said head, the faceof said head being perforated in communication with' said last means to hold a **label** thereon, means for feeding a strip oi’ **labels** to said head and cuttinga **label** oif said strip for each **package**, a. clutch mechanism for operating said last means, said clutch mechanism being operated by said checking means to in turn cause operation of said **label** feeding and cutting mechanism each time said pivoted arm engages a **package** at said checking station, valve means for relieving the vacuum in said head when a. **label** is being fed by said **label** feeding means to a position in front of said head, means to mechanically engage the **label** with said head until said valve is closed and the vacuum established for holding said **label** to said head, said last means being moved out of the way after the vacuum is establishedand before said head is moved toward the **package**, said head being iioatingly mounted by means of a spring connection for finding of itself a square seating against the end of the **package**, spring means at the opposite end of the **package** opposing said head, and means for discharging the wrapped and **labelled** **package** from said rotor. 7; In a wrapping machine, a rotor having pockets, means for imparting intermittent rotation to said rotor; to move the pockets thereof to successive stations, means to wrap 3, wrapper around an article in each pocket as said wwf is advancedstation to station and for heat **sealing** the Wrapper in relation to the article, means for checking whether or not there is a **package** at-a-station’ beyond said last means, said cheek- 2,e42,7ov ing means comprising a pivoted element to which movement is imparted each cycle of operation of the wrapping machine, said element having a part to extend into si pocket of said rotor, la.-bellirig mechanism comprising a movable head for carrying a **label** to a position against the end of a **package** at a station beyond said checking means. means for producing a vacuum in said head to hold a **label** thereagainst, means for feeding a strip of **labels** to said head and cutting a **label** off said stlip for each **package**, clutch mechanism for operating said last means, said clutch mechanism being operated by said checking means to cause said **label** feeding and cutting mechanism to operate only when there is 2. **package** at said checking station, said head being fioatingly mounted by means of 2. spring cormection for finding of itself a. square seating against the end of a **package**, means at the opposite end of the **package** to support it in opposition to said head and its spring connection, and means for discharging the wrapped and **labelled** **package** from said rotor. 8. A wrapping machine comprising a pocketed rotor, means for imparting intermittent rotation to said rotor to move the pockets thereof to successive stations, means to wrap a wrapper around an article in each pocket as said rotor is advanced, means for heat **sealing** the Wrapper in relation to the article, means for checking whether or not there is a **package** at a. station beyond said heat **sealing** means comprising 9. pivoted aim to which movement is imparted each cycle of operation of the wrapping machine, said arm having a part to extend at said last mentioned station into a. pocket of said rotor, **labelling** mechanism comprising a movable head for carrying a **label** to a position against the end of a- **package** at another station beyond said checking means, means for feeding a strip of **labels** to said head and cutting a, **label** off said strip for each **package**, clutch mechanism for operating said last means, said clutch mechanism being operated by said pivoted arm to cause said **label** feeding and cutting mechanism to operate only when there is a **package** at said checking station, said head being fioatingly mounted for finding of itself a square seating against the end of a **package**, means at the opposite end of the **package** to support it in opposition to said head, and means for discharging the Wrapped and **labelled** **package** from said rotor. 9. In a wrapping machine of the character disclosed, a rotor, said rotor having a plurality uf axially elongated article receiving pockets therearound having **open** ends and an **open** outer side, each oi said pockets having a movable article gripping member, means for iinparting intermittent rotation of said rotor to move the pockets thereof to successive stations each cycle of

operation of the wrapping machine, an article cariying conveyor adapted to receive articles to be wrapped and to convey them to one of said sta.tions_ a ram at said station for moving the articles from said conveyor and a wrapper for each article into the **open** sides of said pockets of said rotor, means to move the article gripping member of 21 rotor pocket receiving an article and wrapper to a position to receive them, means movable radially of said rotor and constituting nrst end flap folders at the **open** ends of said pockets as the article and wrapper are caused by said 1-am to enter a pocket of said rotor, a heater shoe located at a station of said rotor beyond said last means, means for moving said heater shoe toward said rotor While it is stationary, means constituting second and third end flap folders at the **open** ends of said pockets at one station of rotation of said rotor and constituting fourth end flap folders at the **open** ends of said pockets as the rotor advances thereafter, said lsist means including heaters for the ends of a wrapped **package** as the rotor is advanced and during the time it is stationary with a **package** intermediate the ends of said last means, means for checking whether or not there is a **package** at a station beyond said last means, said checking means comprising a, pivoted arm to which movement is imparted each cycle of operation of the wrapping machine, said arm having a part to extend into a pocket of said rotor, **labelling** mechanism comprising a movable head for carrying a **label** to a position against the end of a **package** at the station beyond said checking means, means for producing a vacuum in said head, the face of said head being perforated in communication with said means to hold a **label** thereon, means for feeding a, strip of **labels** to said head and cutting a **label** oil said strip for each **package**, a clutch mechanism for operating said last means, said clutch mechanism being operated by said checking means to in turn cause operation of said **label** feeding and cutting mechanism oach time said pivoted arm engages a **package** at said last station, valve means for relieving the vacuum in said head when a **label** is being fed by said **label** feeding means to a position in front of said head, means to mechanically engage the **label** with said head until said valve is closed and the vacuum thereby established for holding said **label** to said head, said last means being moved out of the way after the vacuum is established and before said head is moved toward the **package**, said head being Hoa-tingly mounted by means of a spring eozmection for finding of itself a square seating against the end of the **package**, spring means at the opposite end of the **package** opposing said head, and means for discharging the wrapped and **labelled** **package** from said rotor. 10. In a wrapping machine, a rotor having a plurality of axially elongated article receiving pockets having **open** ends and an **open** outer side, means for imparting intermittent rotation of said rotor to move the pockets thereof to successive stations, a pocket conveyor adapted to receive articles to be wrapped and to convey them to one of said stations, means at said station for moving the articles from said conveyor and a wrapper for each article into the **open** sides of said pockets of said rotor, means movable radially of said rotor and constituting first end flap folders at the **open** ends of said pockets as the article and wrapper enter a pocket of said rotor. means constituting second and third end flap folders at the **open** ends of said pockets at one station of rotation of said rotor, stationary means constituting fourth end Hap folders at the **open** ends of said pockets as the rotor advances thereafter, means for checking whether or not there is a **package** at a station beyond said last means, **labelling** mechanism comprising a, movable head for carrying a **label** to a position against the end of a **package** at the station beyond said checking means, means for producing a. vacuum in said head, the face of said head being perforated in communication with said means to hold a **label** thereon, means for feeding a strip of **labels** to said head and cutting a **label** eff said strip for each **package**, a clutch mechanism for operating said last means. said clutch mechanism being operated by said checking means to in turn cause operation of said **label** feeding and cutting mechanism each time said checking means determines that there is a **package** at said previous station, said head being iioatingly mounted by means of a spring connection for iindlng oi itself a square seating against the end of the **package**, spring means at the opposite end of the **package** opposing said head, and means for discharging -the wrapped and **labelled** **package** from said rotor. 11. In a machine of the character disclosed, ,a rotor, said rotor having a plurality of axially _elongated article receiving pockets having **open** ends and an **open** outer side, each of which has 'a movable article gripping member, means _for imparting intermittent rotation to said rotor to move the pockets thereof to successive stations. an article carrying conveyor adapted to receive articles to be Wrapped and to 'convey them to one of said stations. a ram at,_s,aid station for moving the articles from said conveyor and wrappers therefor into the **open** sides of said pockets of said rotor, means to movevthe article gripping member of a rotor pocket receiving an article and wrapper to a position permitting such reception, each pocket of said rotor having first end :tiap folder -blades at the **open** ends of the pocket, an arcuate first circumferential Hap folder-swingable on the axis of said rotor and . around its circumference in the direction of its rotation to fold the first circumferential flap around the article, reciprocably mounted second end nap folderhlades -at the **open** ends of said pockets, means at one station of said machine E35 for 'moving said last blades inwardly of said rotor while a pocket thereof is stationary at -said station, third end nap -folder blades at the **open** ends of said pockets,~means for mounting said last blades for ,wiping movement -over said second end iiap folder blades, arcuateshoes constituting fourth fend Hap _folders at the **open** ends of said pockets as said rotor is -furthermotated, said shoes -being spaced farther apart at their ends where the article and wrapper enter . between them than at their _other ends. _said other ends being resiliently biased toward each other, and means for discharging the Wrapped **package** from said rotor. 12. In a wrapping machine of the -character L50 disclosed, a rotor, said rotor having ,a _plurality ' of axially elongated article receiving pockets therearound having **open** ends and an -**open** outer side, each-of said pockets having farrnovable article gripping member, means for im- E55 parting intermittent rotation to said rotor to move the pockets thereof to successive stations each cycle of operation of the wrapping ina- \i0 L25 an L45 ~chine, an article carrying conveyor having pockets adapted to receive articles to be wrapped G00 and to convey them to one of said stations, a ram at said station for moving the articles from the successive pockets of said conveyor and a wrapper for each article into the **open** sidesfof said pockets of said rotor, means to move thegaf, article gripping member of a rotor pocket when it receives an article and wrapper to aposition aifording such reception, each ,pocket of said rotor having radially movable flrst end flap folder blades at the **open** ends of the pocket which are im retained against movement as the article is moved by said ram into a pocket of the rotor, each of said rotor pockets carryinga spring sh06 engaged by the article and its _wrapperzas they are moved into the rotorrpocketby ;said_ram,~,75 said shoes holding /the wrappers against theartieles, an arcuate Hrst pircuxnferential flap folder swingableron the shaft _of said rotor across the _open ssouter side 'of the pocket, stationary arcuate nap folder fingers adjacentthe periphery of said rotor and extending from adjacent the station thereof that receives the article to adja~ centlthe next station thereof, Va heater shoe located at a station of ,said rotor beyond. the ends of said nngers, a rock arm carrying said heater -shoe, means .foriswinging said rock arm,for movi¥1E_saipl l1eater_shQe_toWa1jd_ s_aid .rotor while it is stationary, Vreoiproeably _mounted second end Hap folder blades at the fopen ends of said _pockets positioned at another station of said rovtor,»1neans for movingrsaid last bladesninwardly of said rotor while aipocket thereof is stationary at said _another_station, projections engageable with said first end flap folder blades to move them out of the ,way of said second nap folder blades, said projections being movable simultaneously With saidvsecond end, flap folder blades, third end flap 'folder bldesat the **open** ends of said pockets, meansjor mounting said last blades for wiping -movement over said second enddiap folder blades, said means for mounting including rotatable cranks, _stationary arcuate shoes constituting fourth end flap folders as said rotor is further rotated, said shoes being spaced farther apart at their ends where the article and wrapper enter between them than at their other ends, said other ends being ref siliently biased toward (each other, s_aid shoes includingvheaters for the ends of av/rapped **package** as the rotor is advanced and during the time git is holding a **package** stationary intermediate the ends of said arcuate shoes, and means for discharging the wrapped **package** from said rotor. ~l3. Ina wrappingmachhie, a rotor having fa plurality of axially -elongated article receiving -pockets having **open** ,ends and an **open** outer side, each of said pockets havingla movable ar- -ticle gripping member, means for imparting intermittent rotation to said rotor to move the pockets thereof to successive stations, an article carrying conveyor,_a ram at one of said stations for movlngfarticles fromosaid conveyor and wrappers therefor into the **open** sides of said pockets ,of said rotor, means to move the article gripping member of a- -rotor pocket as it receives an article and Wrapper to aposition affording such reception,-.each pocket of saidrotor having first .end Hap folder blades at the **open** ends of the pocket, each 'of said rotor pockets carrying a normally extendedlspring shoeengaged by the article and 'itsiwrapper andthereby retracted against the 'spring bias_as;they are moved into the rotor pocket by said ram, a first circumferential flap folder ,swingable on the axis of said rotor and thereby movable circumferentially around 'said rotor, stationary flaplolding means adjacent the periphery -of said rotor and extending from adjacent the-station thereof thatreceives the article to adjacent the next station thereof, a heater, .means for -moving said heater towardsaid rotor eaohgcyole of operation of the machine, secondfend flap folder blades at the **open** ends of said pockets positioned at another station of said rotor while a pocket thereof is stationary at said another station, means for moving said lastblades inwardly of said rotor, third end flap folder_blades,a,t the **open** ends of said pockets,_means,for moving said last blades for wiping movement over said second end nap folder blades, arcuate shoes constituting fourth end flap folders at the **open** ends of said pockets as said rotor is further rotated, heaters for heating the ends of 9. **package** after they are :folded down by said end flap folders, and means for discharging the completed **package** from said rotor. 14. In a wrapping machine of the character disclosed, a rotor, said rotor having a plurality of axially elongated article receiving pockets therearound having **open** ends and an **open** outer side, each of said pockets having a movable article gripping member, means for imparting intermittent rotation to said rotor to move the pockets thereof to successive stations each cycle of operation of the wrapping machine, an article carrying conveyor adapted to receive articles to be wrapped and to convey them to one of said stations, a rain at said station for moving the articles from said conveyor and wrappers therefore into the **open** sides of said pockets of said rotor, means to move the article gripping member of a rotor pocket receiving an article and wrapper to a position for such reception, each pocket of said rotor having radially movable iirst end flap folder blades at the **open** ends of the pocket which are retained against movement as the article is moved by said ram into a pocket of the rotor for eifecting a first end

flap fold on the wrapper, each of said rotor Dockets carrying a spring shoe engaged by the article and its wrapper as they are moved into the rotor pocket by said ram, an arcuate first circumferential flap folder swingable on the shaft of said rotor across the **open** side of the pocket, stationary arcuate flap folder angers 3¢diHCEI1t the periphery of said rotor and extending from adjacent the station thereof that receives the article to adjacent the next station thereof, reciprocably mounted second end fiap folder blades at the **open** ends of said pockets positioned at another station of said rotor, means for moving said last blades inwardly of said rotor while a pocket thereof is stationary at said another station, projections engageable with said Hrst end nap folder blades to move them out of the way of said second end flap folder blades, said projections being movable simultaneously with said second end ilap folder blades, third end flap folder blades at the **open** ends Of Said pockets, means for mounting said last blades for rotary wiping movement over said S_GO1'_gt;d end BHP f01d€1' blades. said means for mounting con1p1'iSiI1e a bell crank carrying each blade on the outer end of one arm of the bell crank, the outer end of the other arm having a, slot and pin connection with a stationary portion of the wrapping machine, rotatable cranks having their crank pins rotatably mounted in the bends of said bell cranks, stationary arcuate shoes constituting fourth end Hap folders at the **open** ends of said pockets as said rotor is further rotated, said shoes being spaced farther apart at their ends where the article and wrapper enter between them than at their other ends, said other ends being resiliently biased toward. each other, each pocket of said rotor nnaiiy reaching a discharge Station, and means for positively moving the spring shoe at said discharge station to cause it to effect discharge of the wrapped **package** from said rotor. 15_ In a Wrapping machine, a rotor having axially elongated article receiving pockets having **open** ends and an 013511 Olltef side, means f01` imparting intermittent rotation to said rotor to move the pockets thereof to successive stations, a pocket conveyor adapted to receive articles to ice wrapped and to convey them to one of said stations, a ram at said station for moving the articles from the successive pockets of said conveyor and a wrapper for each article into the **open** sides of said pockets of said rotor, each pocket of said rotor having radially movable first end Kap folder blades at thc **open** ends of the pocket. each of said rotor pockets carrying a spring shoe engaged by the article and its wrapper as they are moved into the rotor pocket by said ram, an arcuate iirst circumferential flap folder movable across the **open** side of the pocket, reoiprocably mounted second end flap folder blades at the **open** ends of said pockets positioned at another station of said rotor, means for moving said last blades inwardly of said rotor while a pocket thereof is stationary at said another station, third end flap folder blades at the **open** ends of said pockets, means for mounting said last blades for wiping movement over said second end flap folder blades, stationary arcuate shoes constituting fourth end nap folders at the **open** ends of said pockets as said rotor is fu_rther rotated, and means for discharging the Wrapped **package** from said rotor comprising an element moved by the wrapping machine each cycle of operation thereof for positively moving the spring shoes of the successive pockets to effect discharge of the wrapped **package** from the rotor pocket at a station beyond said stationary arcuate shoes. 1.6. In a wrapping machine of the character disclosed. a rotor, said rotor having a plurality of axially elongated article receiving pockets therearound having **open** ends and an **open** outer side, each of said pockets having a movable article gripping member, means for imparting intermittent rotation to said rotor to move the pockets thereof to successive stations each cycle of operation of the wrapping machine. a pocket conveyor adapted to receive articles to be wrapped and to convey them to one of said stations, a ram at said station for moving the articles from the successive pockets of said conveyor and wrappers therefor into the **open** sides of said pockets of said rotor, means to move the article gripping member of a. rotor pocket receiving an article and wrapper to a position for such reception, each pocket of said rotor having movable iirst end iiap folder blades at the **open** ends of the pocket which are retained against movement as the article is moved. by said ram into a pocket of the rotor, each of said rotor pockets carrying a spring shoe engaged by the article and its wrapper as they a1`e moved into the rotor pocket by said ram, means constituting second and third end iiap folders at the **open** ends of said pockets at one station of rotation of said rotor and further means constituting fourth end flap folders at the **open** ends of said pockets as the rotor advances thereafter, and means for positively Inoving said spring shoes as they reach a discharge station to cause each one to effect discharge of the wrapped **package** from its respective rotor pocket at a discharge station of said rotor. 17. In a machine of the character disclosed, a rotor, said rotor having a plurality of axially elongated article receiving pockets thercaround having **open** ends and an **open** outer side, each of said pockets having a movable article gripping member means for imparting intermittent rotation to said rotor to move the pockets thereof to successive stations each cycle of operation ot the Wrapping machine, an article carrying conveyor _ aarmov adapted to receive articles to be wrapped and to convey them to one of said stations, a ram at said station for moving the articles from the successive pockets of said conveyor and la wrapper therefor into the **open** sides of said pockets of said rotor. means to move the article gripping member of that rotor pocket receiving an article and Wrapper to a position to afford such reception, each pocket of said rotor having radially movable first end ilap folder blades at the **open** ends of the pocket which are retained against movement as the article is moved by said ram into a picket of the rotor, an arcuate lirst circumferential flap folder swingable on the shaft of said rotor across the **open** outer side of the pocket, stationary arcuate flaps folder fingers adjacent the periphery of said rotor and extending from adjacent the station thereof that receives the article to adjacent the next station thereof, a heater shoe located at a station of said rotor beyond the outlet ends of said Hngers, a. rock arm carrying said heater shoe, means for swinging said rock arm for moving said heater shoe toward the rotor while it is stationary, reciprocably mounted second end flap folder blades at the **open** ends of said pockets positioned at another station of said rotor, means for moving said last blades inwardly of said rotor While a pocket thereof is stationary at said another station, projections engageable with said first end ilap folder blades to move them out of the way of said second end flap folder blades, said projections being movable simultaneously with said second end flap folder blades. third end flap folder blades at the **open** ends of said pockets, means for mounting said last blades for rotary wiping movement over said second end flap folder blades, said means for mounting comprising a bell crank carrying each blade on the outer end of one arm of the bell crank, the outer end of the other arm having a slot and pin connection with a stationary portion of thevwrapping machine, rotatable. cranks having their crank pins rotatably mounted in the bends of said bell cranks, stationary arcuate shoes constituting fourth end flap folders at the **open** ends of said pockets as said rotor is further rotated, said shoes being spaced farther apart at their ends where the article and wrapper enter between' them then at their other ends, said other ends being resiliently biased toward each other, said shoes including heaters for heating said fourth end flap folds as the rotor is advanced and during the time it is stationary with a **package** intermediate the ends of said arcuate shoes, and means for discharging the wrapped **package** from said rotor§ 18. In a wrapping machine ofthe character disclosed, a rotor, said rotor having a plurality cf 'axially elongated article receiving pockets therearound having **open** ends and an **open** outer side, each of said pockets having a movable article gripping member, means for imparting intermittent rotation to said rotor to move the pockets thereof to successive stations each cycle of operation of the wrapping machine, a. pocketed article carrying conveyor adapted to receive articles to be wrapped and to convey them to one of said stations, means at said station for moving the articles from the successive pockets of said conveyor and a wrapper for each article into the **open** sides of said pockets of said rotor, means to move the article gripping member of a rotor pocket as lt receives an article and wrapper, to a position to-afford such reception, meansconstituting first end flap folders at the **open** Ends of said pockets as an article and wrapper 3D l are caused by said nrst means to enter a pocket of said rotor, an arcuate first circumferential flap folder swirigable on the shaft of said rotor across the **open** side of the pocket, stationary arcuate flaps folder fingers adjacent the periphery of said rotor and extending from adjacent the station thereof that receives the article to adjacent the next station thereof, a heater shoe located at said next station of said rotor, a rock arm carrying said heater shoe, means for swinging said rock arm for moving said heater shoe toward the rotor while it is stationary, reciprocably mounted second end iiap folder blades at the **open** ends of said pockets positioned at another station of said rotor, means for moving said last blades inwardly of said rotor while a pocket thereof is stationary at said another station, projections engageable with said Ilrst end flap folder blades to move them out of the way of said second end nap folder blades, said projections being movable simultaneously with said second end nap folder blades, third end flap folder blades at the **open** ends of said pockets, means for mounting said last blades for rotary wiping movement over said second end nap folder blades, said means for mounting comprising bell cranks carrying said blades, said bell cranks having slot and pin connections with a stationary portion of the wrapping machine and rotatable cranks having their crank Dins rotatably mounted in said bell cranks, stationary arcuate shoes constitutlng fourth end flap folders as said rotor is further rotated, said shoes being spaced farther' apart at their ends where the article and wrapper enter between them than at their other ends, said other ends being resiliently biased toward. each other, said shoes including heaters for the ends of a. wrapped **package** as the rotor is advanced and during the time it is stationary with a **package** intermediate the ends of said arcuate shoes, and means for discharging the wrapped **package** from said rotor. 19. In a wrapping machine of the character disclosed, a rotor, said rotor having a plurality of axially elongated article receiving pockets therearound having **open** ends and an **open** outer side, each of said pockets having a movable article gripping member, means for imparting intermittent rotation to said rotor to move the Dockets thereof to successive stations each cycle of operation of the wrapping machine, an article carrying conveyor adapted toreceive articles to be wrapped and to convey them to one of said stations, a ram at said station for moving the articles from the successive pockets of said conveyor and a wrapper for each article into the **open** sides of said pockets of said rotor, means to move the article gripping member of a rotor pocket that receives an article and wrapper to a position for aifording such reception, means constituting iirst end flap folders at the **open** ends oi' said pockets as said ram enters a pocket of said rotor, a first circumferential flap folder, means for moving the same across the **open** outer side of the pocket, arcuate flap folder means adjacent the periphery of said rotor and extendingffrom adjacent the station thereof that receives the article to adjacent the next station thereof, reeiprocably mounted second end flap folder blades at the **open** ends of said pockets positioned at another station of said rotor, means for moving said blades inwardly of said rotor while a pocket

thereof is stationary at said another station, projections engageable with said first end flap folder means to move them out of the way of said second end flap folder blsdes,.thlrd end Hap folder blades :a,e42,'7o'1 at the **open** ends of said pockets, said projections being movable simultaneously with said second end Hap folder blades. means for mounting said last blades for rotary wiping movement over said second end flap folder blades, stationary arcuate shoes constituting fourth End flap folders at the **open** ends of said pockets as said rotor is further rotated, said shoes being spaced farther apart at their ends where the article and wrapper enter between them than at their other ends, said other ends being resiliently biased toward each other, and means for discharging the wrapped **package** from said rotor. 20. A machine of the character disclosed comprising a rotor, said rotor having a plurality oi axially elongated article receiving pockets therearound having **open** ends and an **open** outer side, each of said pockets having a movable article gripping member, means for imparting intermittent rotation to said rotor to move the pockets thereof to successive stations each cycle of operation oi the \vrapping machine, an article carrying conveyor adapted to receive articles to be wrapped and to convey them to one of said statiom, a ram at said station for moving the articles from the successive pockets of said conveyor and a wrapper therefor into the **open** sides of said pockets of said rotor, means to move the article gripping member of a rotor pocket receiving an article and wrapper to a position affording such reception, each pocket of said rotor having radially movable first end flap folder blades at the **open** ends of the pocket which are retained against movement as the article is moved by said ram into a pocket of the rotor, a heater movable toward the rotor while it is stationary, reciprocably mounted second end flap folder blades at the **open** ends of said pockets positioned at another station of said rotor, means for moving said last blades inwardly of said rotor \vhile a pocket thereof is stationary at said another station, projections engageable with said first end flap folder blades to move them out of the way of said second end nap folder blades, third end. flap folder blades, said projections being movable simultaneoigsly with said second end Hap folder blades, means for mounting said last blades for rotary wiping movement over said second end flap folder blades, said means for mounting comprising a bell crank carrying each blade on the outer end of one arm of the bell crank, the outer end of the other arm having a slot and pin connection with a stationaw portion of the wrapping machine, rotatable cranks having their crank pins rotatably mounted in the bends of said bell cranks, stationary arcuate shoes for performing fourth end nap [olds on said wrapper as said rotor is further rotated, said shoes being spaced farther apart at their ends where the article and wrapper enter between them than at their other ends, said other ends being resiliently bi/ased toward each other, said shoes including heaters for heating said fourth end flap folds as the rotor is advanced and during the time it is stationary with a **package** intermediate the ends of said arcuate shoes, and means for discharging the wrapped **package** from said rotor. 21, In a wrapping machine, a rotor having a plurality of axially elongated article receiving pockets therearound having **open** ends and an **open** outer side, means for imparting intermittent rotation to said rotor to move the pockets thereof to successive stations, an article carrying conveyor adapted to receive articles to be wrapped and to convey them to one of said stations, means at said station for moving the articles from the successive pockets of said conveyor and a wrapper therefor into the **open** sides of said Dockets of said rotor, each pocket of said rotor having radially movable first end flap folder blades at the **open** ends of the pocket which are retained against movement as the article is moved by said ram into a pocket of the rotor, a heater shoe located at a further station of said rotor, a rock arm carrying said heater shoe, means for swinging said rock arm for moving said heater shoe toward the rotor while it is stationary, reciprocably mounted second end ilap folder blades at the **open** ends of said pockets, means at a still further station of said rotor for moving said last blades inwardly thereof while a pocket of said rotor is stationary at said still further station, said last blades having means movable simultaneously therewith for moving said irst end nap folder blades out of thc way as said second end flap folder blades so move, third end flap folder blades at the **open** ends of said pockets for rotary wiping movement over said second end flap folder blades, stationary arcuate shoes constituting fourth end flap folders at the **open** ends of said pockets as said rotor is further rotated, said shoes including heaters for the ends of a wrapped **package**, and means for discharging the wrapped **package** from said rotor. 22. In a wrapping machine, a rotor having a plurality of axially elongated article receiving pockets having **open** ends and an **open** outer side, means for imparting intermittent rotation to said rotor to move the pockets thereof to successive stations, an article carrying conveyor adapted to receive articles to be wrapped and convey them to one of said stations, means at said station for moving the articles from said conveyor and a Wrapper therefor into the **open** sides of successive pockets of said rotor, each pocket of said rotor having radially movable first end flap folder blades at the **open** ends of the pocket which are retained against movement as the article is moved into a pocket of said rotor, a heater shoe located at a station of said rotor, means for moving said heater shoe toward the rotor while it is stationary, reciproeably mounted second end flap folder blades at the **open** ends of said pockets positioned at another station of said rotor. means for moving said last blades inwardly of said rotor while a. pocket thereof is stationary at said another station and at the same time moving said first end flap folder blades radially inward in relation to said rotor, third end flap folder blades at the **open** ends of said pocket, means for moving said last blades over the ends of a wrapped **package**, stationary arcuate shoes constituting fourth end flap folders at the **open** ends of said pockets, and means for discharging the wrapped **package** from said rotor.



42) Family number: 709463 (US3589506A)

Title: PLASTICS **CONTAINERS** AND **PACKAGES**

Priority:

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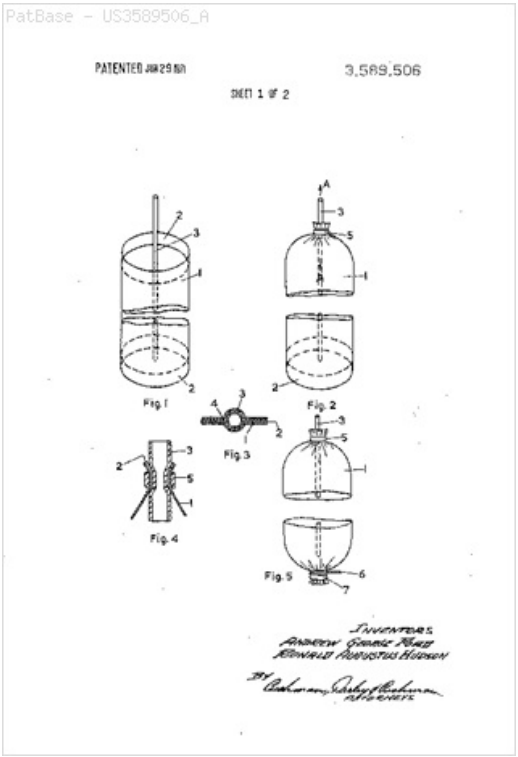
Probable Assignee: ICI LTD

Assignee(s):(std)**:** ICI LTD ; BULL SA MACHINES ; RECKITT AND SONS LTD ; IMPERIAL CHEMICAL INDUSTRIES LTD LONDEN ; MICHAEL MAUL ; MAUL MICHAEL

Assignee(s): RONALD A HUDSON ; IMPERIAL CHEMICAL INDUSTRIES LIMITED ; IMPERIAL CHEMICAL INDUSTRIES

	LTD ; IMPERIAL CHEMICAL IND LTD ; IMPERIAL CHEMICAL LTD GB ; COMPAGNIE DES MACHINES BULL ; ANDREW G FORD ; BULL MACHINES SA ; IMPERIAL CHEMICAL ; IMPERIAL CHEM IND LTD ; IMP CHEMICAL IND LONDON GB LTD ; IMPERIAL CHEM IND LTD GB ; IMP CHEMICAL IND LTD ; IMP CHEMICAL LTD GB ; IMP CHEM IND LTD ; RECKITT AND SONS LIMITED
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Inventor(s):	RONALD AUGUSTUS HUDSON HERTS GB ; ANDREW G FORD ; RONALD A HUDSON ; JOHN WILLIAM LEWIS ; HUDSON RONALD A GB ; HUDSON R A ; HUDSON R GB ; FORD ANDREW G GB ; ANDREW GEORGE FORD AND RONALD AUGUSTUS HUDSON ; FORD A G ; FORD A GB
Agent(s):	S HOROWITZ AND CO
International class (IPC 8-9):	A23L2/00 A23L3/00 B05B11/00 B65B3/00 B65B3/02 B65B3/04 B65B3/18 B65B31/00 B65B31/04 B65B31/06 B65B51/00 B65B51/10 B65B9/00 B65D33/16 B65D75/10 B65D77/18 B65D81/20 C07D489/12 F17C1/16 (Advanced/Invention); A23L2/00 A23L3/00 B05B11/00 B65B3/00 B65B3/04 B65B31/00 B65B31/04 B65B51/00 B65B51/10 B65B9/00 B65D33/16 B65D75/04 B65D77/10 B65D81/20 F17C1/00 (Core/Invention); B65B B65D (Subclass/Invention)
International class (IPC 1-7):	A23L2/38 A23L3/00 B05B11/00 B65B3/02 B65B3/04 B65B3/18 B65B31/00 B65B31/04 B65B31/06 B65B5/00 B65B51/00 B65B51/10 B65D11/00 B65D53/08 B65D83/14 C07D489/00
CPC:	C07D489/12 B65D77/18 B65D81/2061 B65B31/046 B65B55/20 B65D33/1616 B65B51/00 G06K7/02
European class:	124HM3C B65B31/04E B65B51/00 B65D33/16D B65D77/18 B65D81/20D2 C07D489/12 G06K7/02 L65B55/20
US class:	141/290 141/48 206/0.6 206/46 220/62.12 222/394 234/115 234/124 234/129 383/119 383/96 426/106 426/116 426/131 426/404 426/410 426/411 426/413 426/477 53/133.1 53/415 53/434 53/512 99/17.1B
Classification Explorer	
Cited documents:	US3358821 A, US2547456 A, US2444564 A, US2315741 A, US2279161 A, US2210552 A, US2168434 A, US1856737 A, US1818338 A, US1657696 A, US1195605 A, IT649849 A, GB957509 A, GB926159 A, GB900753 A, FR1447945 A, BE520561 A, AT125360 B,
Forward Citations:	WO12057982, WO12050463, WO10129530, WO04042763, WO04042763, US8827114, US8745960, US8661772, US8568029, US8468779, US8002139, US7805913, US7490452, US7165376, US6592702, US6585843, US6415943, US6070750, US6036046, US5976085, US5951799, US5768859, US5697366, US5532011, US5492721, US5226564, US4920726, US4779736, US4734292, US4699809, US4531656, US4529108, US4491247, US4479243, US4457456, US4440319, US4340379, US4224970, US4116336, US4113146, US4055201, US4001450, US3982029, US3877197, US3851688, US3791557, US3780488, US3735093, US3447743, US3128943, US2014182244, US2013167481, US2011192121, US2011182533, US2011068154, US2010282824, US2010281831, US2010252585, US2009324783, US2009007523, US2009003736, US2007095424, US2006254219, US2005106291, JP6181770, JP51153078, JP2016504346, FR2578816, FR2373973, FR2228679, FR2228679, FR2196938, EP2062897, EP2062896, EP0265577, EP0219750, EP0219750, EP0051443, EP0039626, EP0021188, DK151450, DK151450, DE4132422, DE2722265, DE2647983, CN102548847, CN102548847,

Abstract:
Source: US3589506A Plastics film **container** for contents under superatmospheric pressure, closed by a bunched neck provided with a **sealable** material forming an internal gasket, and an external mechanical **closure**, and with a releasably **sealed** tube passing through the bunched neck.



43) Family number: 21928069 (US2654517A)

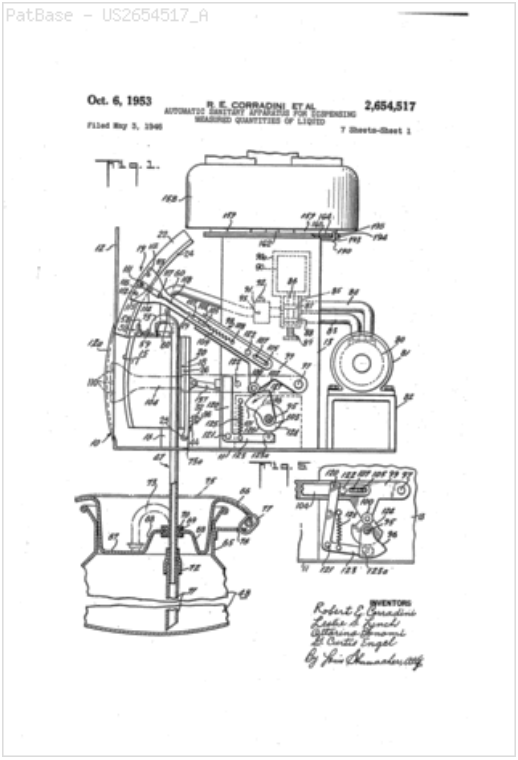
Title:	AUTOMATIC SANITARY APPARATUS FOR **DISPENSING** MEASURED QUANTITITES OF LIQUID
Priority:	US19460667064 19460503

Family:

Publication number	Publication date	Application number	Application date
US2654517 A	19531006	US19460667064	19460503

Probable Assignee:	CORRADINI
Assignee(s):(std):	CORRADINI
Inventor(s):(std):	CORRADINI ROBERT E ; CURTIS ENGEL G ; LYNCH LESLIE S ; OTTORINO BONOMI
Inventor(s):	ENGEL G CURTIS ; BONOMI OTTORINO
International class (IPC 8-9):	B67D3/00 B67D7/72 (Advanced/Invention); B67D3/00 B67D7/06 (Core/Invention)
International class (IPC 1-7):	G01F13/00
CPC:	B67D3/00 B67D7/725
European class:	B67D3/00 B67D7/72B
US class:	141/157 141/174 141/51 141/69 221/11
Classification Explorer	
Cited documents:	US3211707 A, US2370276 A, US2361863 A, US2333118 A, US2313095 A, US2278013 A, US2191154 A, US2107274 A, US2081650 A, US2081159 A, US2081158 A, US1921415 A, US1906839 A, US1885081 A, US1882812 A, US1776539 A, US1416345 A, US1246180 A, US1122334 A,
Forward Citations:	US2949275, US2907495,

Abstract:
Source: US2654517A (Claim 1) 1. In a device fcir **dispensing** liquids from a **storage** **container** into a drinking receptacle, ih_ eluding means for creating gaseous suction con_ dition in the **container** to couse liquid to flbw therefrom into the receptacle, comprising q suction chamber for removably receiving the receptacle said chamber having a side vertical door when' in normally closed position, means swingably mounting the door for inovement to an **open** inclined position for g-aiding a receptacle into the chamber, and power operated means for swinging said door from **open** to closed positions in timed relation with operation of said suction creating means.



44) Family number: 21979845 (US2663981A)

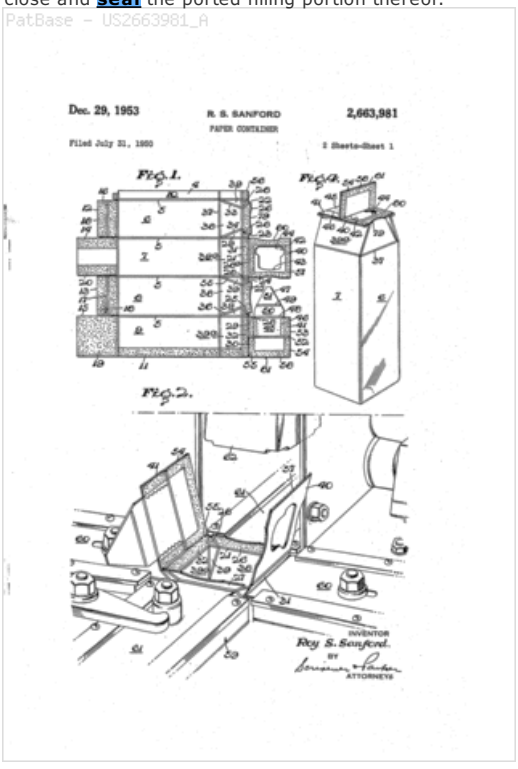
Title:	PAPER **CONTAINER**
Priority:	US19500176860 19500731

Family:

Publication number	Publication date	Application number	Application date
US2663981 A	19531229	US19500176860	19500731

Probable Assignee:	SANFORD ROY S
Assignee(s):(std):	SANFORD ROY S
Inventor(s):(std):	SANFORD ROY S
International class (IPC 8-9):	B65B7/20 B65D5/70 (Advanced/Invention); B65B7/16 B65D5/70 (Core/Invention)
International class (IPC 1-7):	B65B7/20
CPC:	B65B7/20 B65D5/701
European class:	B65B7/20 B65D5/70B
US class:	229/160.2 229/232 53/370.7 53/376.8 53/377.6 53/387.4 53/411 53/412 53/456 53/472 53/477
Classification Explorer	
Cited documents:	US2471017 A, US2321050 A, US2321042 A, US2218670 A, US2085979 A,
Forward Citations:	US5029713, US4569474, US4292787, US3298591, US2891453, US2865550, US2832523, US2745323,

Abstract:
Source: US2663981A (Claim 1) 1. The method of forming, coating, filling, and **sealing** the end of a tubular **container** of sheet material, which comprises preparing a blank of sheet material having a plurality of side wall panels provided with foldable end closing flaps at the bottom end thereof, iiange forming wnels at the upper ends thereof, a top **closure** flap integral with one flange forming panel provided with ported **dispensing** and. filling portions, and a second top **closure** flap integral with another iiange forming panel having a portion provided with a tear strip and another portion hingedly secured thereto, folding said"blank and adhesively securing adjacent wall panels together to form a tube of polygonal cross section, folding and adhesively securing said foldable end flaps together in overlapping relationship to form a bottom **closure**, folding upper portions of said wall panels inwardly and said flange forming panels outwardly to form a substantially continuous nange about the upper end oi' the **container**, folding and adhesively securing the tirst named top **closure** nap to said flange and substantially simultaneously folding and adhesively securing the first named portion of the second top **closure** flap to the first named top **closure** nap with said tear strip **covering** the ported **dispensing** portion of the hrst named top **closure** iiap and with the second named portion of the second top **closure** flap in **open** position, introducing a coating material into the **container** through the ported Hlling portion of the first named top **closure** Hap and draining the coating material from the **container** therethrough, setting the coating material, filling the **container** with a desired product through said ported filling portion, and closing and adhesively securing the second named portion of the second top flap to the first named top iiap to close and **seal** the ported filling portion thereof.



45) Family number: 21984415 (US2664237A)

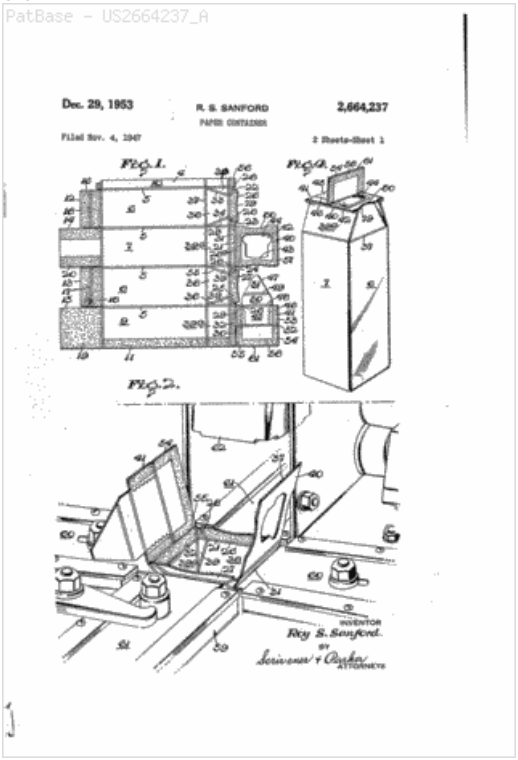
Title:	PAPER **CONTAINER**
Priority:	US19470783904 19471104

Family:

Publication number	Publication date	Application number	Application date
US2664237 A	19531229	US19470783904	19471104

Probable Assignee:	ACE CARTON CORP
Assignee(s):(std):	ACE CARTON CORP ; EX CELL O CORP
Inventor(s):(std):	SANFORD ROY S
International class (IPC 8-9):	B65B7/20 B65D5/70 (Advanced/Invention); B65B7/16 B65D5/70 (Core/Invention)
International class (IPC 1-7):	B65B7/20 B65D5/70
CPC:	B65B7/20 B65D5/701
European class:	B65B7/20 B65D5/70B
US class:	222/541.6 229/112 229/160 229/232 53/133.8 53/377.7 53/381.1 53/564 53/565
Classification Explorer	
Cited documents:	US2593019 A, US2581237 A, US2415081 A, US2360415 A, US2349748 A, US2339896 A, US2335865 A, US2321050 A, US2321042 A, US2272203 A, US2249052 A, US2128893 A,
Forward Citations:	US9327879, US4285461, US4183458, US3063600, US2012118886, DE2649630, DE1061174, DE1048139,

Abstract:
Source: US2664237A (Claim 1) 1. A **closure** for the **open** end of a tubular **container** of rectangular cross section including a **closure** Hap adhesivelysecured to an end portion of thecontainer and closing substantially onehalf of the, **open** end thereof, said nap presenting' a Hat unbroken outer surface, and a rectangular filler flap integral with and hixlgedly connected to the lirst named flap along one edge and having its remaining edges free to allow independent pivotal movement thereof about said hinged connection to expose the remaining portion of- the **open**,.e!1c1'ofi.11he **container** to allow f1lling;of;the ad -io 1 0 _ **container**; i1he,¢free,ee,dE€S».of said filler flap ,beings adapted_gt;to_'be¢.ac1hesive1y S€DI.II`Ed;t0,t1'lB end DOFtion. of the ,**container** to, close said remaining -Dolition of said open1cnd,and_ pijesentingeafnat and. unbroken l outer, surface .forming . a continuation of and lying in the plane of _the outer surface of the first named iaD..the,,l:i/tter nap being prof vided with a.member. separable ,therefrom for providing a **dispensing**. **opening** therein.



46) Family number: 22226734 (US2668085A)

Title:	ACTIVATOR CONTROL
Priority:	US19510207466 19510124

Family:

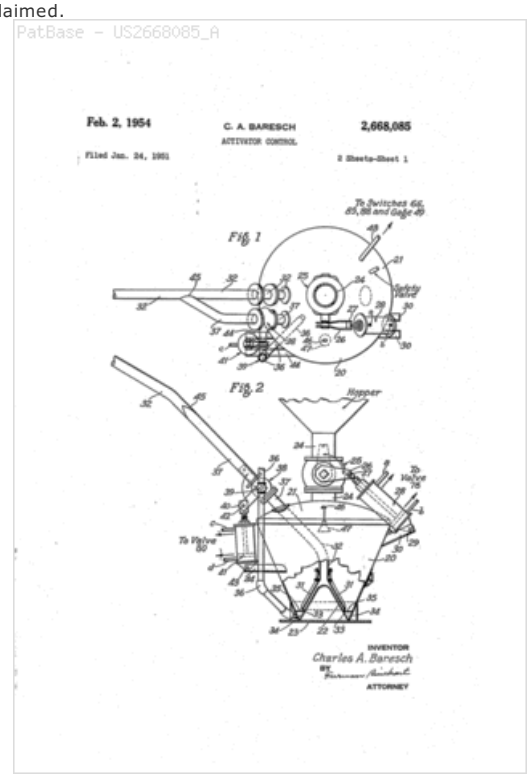
Publication number	Publication date	Application number	Application date
US2668085 A	19540202	US19510207466	19510124

Probable Assignee:	MORSE BOULGER DESTRUCTOR COMPA
Assignee(s):(std)**:**	MORSE BOULGER DESTRUCTOR COMPA
Assignee(s):	MORSE BOULGER DESTRUCTOR COMPANY ; MORSE BOULGER DESTRUCTOR CO
Inventor(s):(std)**:**	BARESCH CHARLES A
International class (IPC 8-9):	B65G53/52 (Advanced/Invention); B65G53/34 (Core/Invention)
International class (IPC 1-7):	B65G53/66
CPC:	B65G53/525
European class:	B65G53/52F
US class:	222/373 406/142 406/15 406/25

Classification Explorer

Cited documents:	US2413479 A, US2221741 A, US2124018 A, US2032367 A, US2027697 A, US1935843 A, GB449432 A,
Forward Citations:	US4662799, US4061401, US3776599, US3727985, US3578814, US3549206, US3471626, US3391832, US3355221, US3297366, US3241725, US2907606, US2793085, US2793084, DE1556686,

Abstract:
Source: US2668085A (Claim 1) possible within the scope of inve,-qtioii claimed.



47) Family number: 22884535 (US2757842A)

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Title: Bag filling apparatus

Priority: US19480055395 19481019 US19500167403 19500610 US19500167404 19500610

Family:

Publication number	Publication date	Application number	Application date
US2676442 A	19540427	US19480055395	19481019
US2757842 A	19560807	US19500167403	19500610
US2790540 A	19570430	US19500167404	19500610

Probable Assignee: FMC CORP

Assignee(s):(std)**:** FMC CORP ; SIMPLEX PACKAGING MACHINERY IN

Assignee(s): SIMPLEX PACKAGING MACHINERY INC ; FOOD MACHINERY AND CHEMICAL CORP

Inventor(s):(std)**:** GAUBERT RENE J

International class (IPC 8-9): B65B1/02 B65B43/30 B65B43/56 (Advanced/Invention); B65B1/00 B65B43/26 B65B43/42 (Core/Invention)

International class (IPC 1-7): B65B1/02 B65B43/30 B65B43/56

CPC: B65B43/56 B65B43/30 B65B1/02

European class: B65B1/02 B65B43/30 B65B43/56

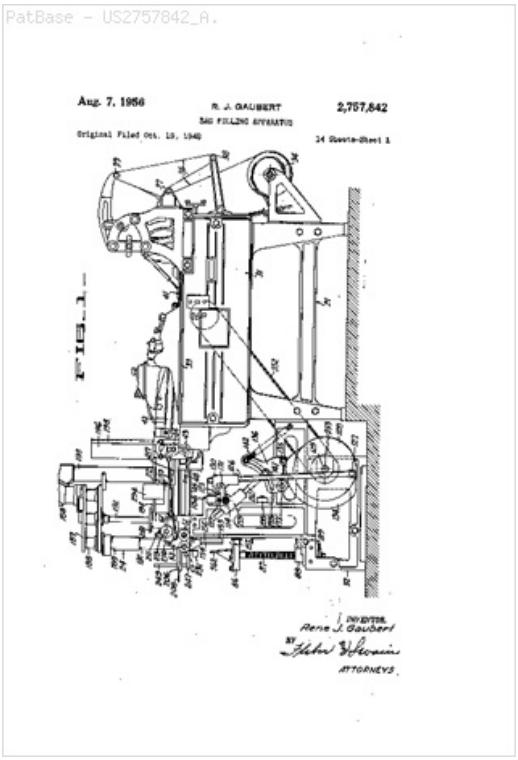
US class: 141/160 141/166 141/168 141/312 198/637 198/736 198/742 198/749 222/61 53/386.1 53/493 53/502 53/506 53/529 53/563 53/570

Classification Explorer

Cited documents: US977632 A, US727554 A, US2583106 A, US2540615 A, US2449272 A, US2437117 A, US2409626 A, US2376289 A, US2350666 A, US2347902 A, US2343879 A, US2333571 A, US2322430 A, US2290103 A, US2277783 A, US2180954 A, US2162263 A, US2054486 A, US2011839 A, US1958341 A, US1951572 A, US1931440 A, US1904131 A, US1892148 A, US1886119 A, US1858320 A, US1627391 A, US1589800 A, US1309785 A, US1199580 A, US1039785 A, US1027111 A,

Forward Citations: WO06096076, US8307862, US5005341, US4738351, US4586320, US4247588, US4023238, US3700388, US3607574, US3160277, US3128873, US2908378, US2904945, US2853842, US2848857, US2009031678, EP0493332,

Abstract:
Source: US2757842A (Claim 1) 1. Bag filling apparatus (_gt;f the character described, means for supporting a bag at a bag filling station, a pair of members adapted to be moved in opposite directions relative -to each other and positioned to enpge the sides of a bag adjacent the top thereof, suction nozzles formed in said members, suction means connected to said nozzles, valve means serving to control application of suction to said nozzles whereby when said members are moved apart suction is applied to said nozzles to cause the sides of the bag to adhere to the same, mechanical means for effecting relative movement between said members towards and away from each other, and n-ieans for automatically disabling said last nanied means in response to failure of the suction due to failure of a bag to be presented to said nozzles or improper placement of the bag to close said nozzles.



48) Family number: 21956991 (US2760320A)

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Title: Transfer mechanism

Priority: US19490081154 19490312 US19530357151 19530525 US19530357152 19530525

Family:

Publication number	Publication date	Application number	Application date
US2676443 A	19540427	US19490081154	19490312
US2758767 A	19560814	US19530357152	19530525
US2760320 A	19560828	US19530357151	19530525

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std)**:** CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC

Inventor(s):(std)**:** PIAZZE THOMAS E

International class (IPC 8-9): B65B1/22 B65B43/42 B65B43/54 B65B7/08 (Advanced/Invention); B65B1/00 B65B43/42 B65B7/00 (Core/Invention)

International class (IPC 1-7): B65B1/22 B65B43/42 B65B43/54 B65B7/08

CPC: B65B1/22 B65B43/42 B65B7/08 B65B43/54

European class: B65B1/22 B65B43/42 B65B43/54 B65B7/08

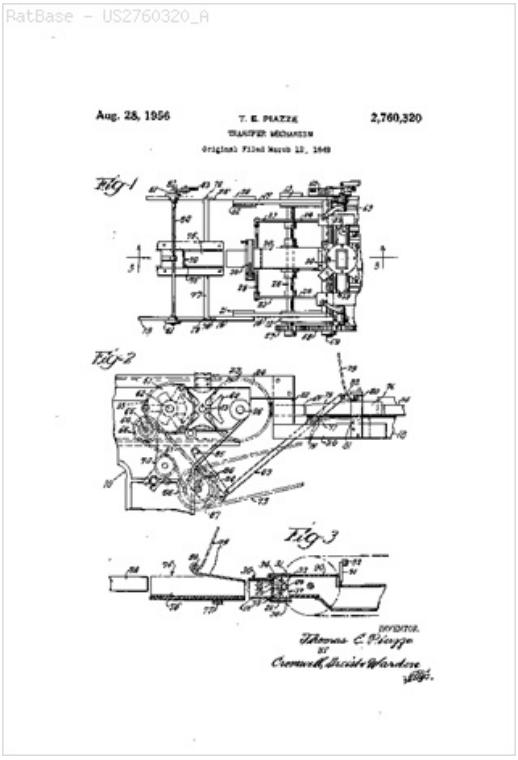
US class: 141/129 141/78 366/128 493/206 53/371.7 53/371.9 53/563

Classification Explorer

Cited documents: US767393 A, US2581795 A, US2542135 A, US2514620 A, US2494584 A, US2427712 A, US2385583 A, US2376810 A, US2235942 A, US2180954 A, US2154715 A, US2135219 A, US2134567 A, US2045230 A, US2022309 A, US1989492 A, US1851870 A, US1826926 A, US1379254 A,

Forward Citations: US3314216, US3248843, US3126288, US2952959, US2940236, US2928218,

Abstract:
Source: US2760320A (Claim 1) I claim: 'i. In a _container fabriceiting and -filling arrangement wherein a_flat boitom coritainer is fabricated on a machine havina a movable forming mandrel and then transferred to a machiiie having a pocketed -conveyor,for receiving a char-,e of materi_l, a containor transfer mechanism comprising -a chute mounted'between the machines in aligned reldtion between sdid forming mandrel and a pock6t in said.



49) Family number: 21575654 (US2683529A)

Title:	**DISPENSING** CARTON
Priority:	US19520312081 19520929

Family:

Publication number	Publication date	Application number	Application date
US2683529 A	19540713	US19520312081	19520929

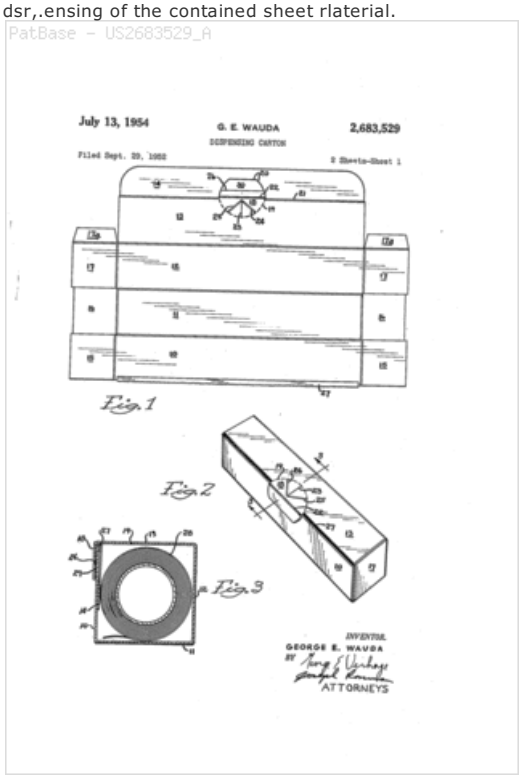
Probable Assignee:	MARATHON CORP
Assignee(s):(std):	MARATHON CORP
Inventor(s):(std):	WAUDA GEORGE E
International class (IPC 8-9):	B65D83/08 B65H35/00 (Advanced/Invention); B65D85/672 (Advanced/Non-invention); B65D83/08 B65H35/00 (Core/Invention); B65D85/67 (Core/Non-invention)
CPC:	B65D83/0882 B65D85/672 B65H35/0006 B65H2701/1752 Y10T225/251 Y10T225/254
European class:	B65D83/08D1D B65H35/00B L65D85/672 L65H701/1752
US class:	225/50 225/53 229/153 229/208

Classification Explorer

Cited documents:	US924094 A, US2658664 A, US2651450 A, US2473492 A, US2472521 A, US2186973 A, US2160164 A, US2125042 A, US2042799 A, US1886211 A, US1827029 A,
Forward Citations:	US5121839, US3974947, US3002667,

Abstract:

Source: US2683529A (Claim 1) 1. **Cover** retention and op.-ning means for a c:ispensin.- carton for the **dispensing** of a ioll of sheet niaterial, said carton including front, bottoi_-, reqr and end walls, a co7ier hing-edly cor-_nected along one edge to said -rear -v;all, a covea: 'Llap hingedly connected to thie opposite ed,,e of said **cover**, and a kri-ife edge coxmected along t,ie Lipper fyee cdge of said -front wall to remmit the sever4ing of desired lengths of said .dispeiised sheet material,,said means compriaing _a ceiitral portion of sai-d coverand Df _said ro..viar Lap defaied bya conbilluous boundaxycomposed of a perforatior, line -in said cove:c and a first cut line in said **cover** flap, said meaiis in the portion lying within the **cover** h-_ virl-.- a second cut line therethrough suasttntially p_,rpe,_id,'_eular to the hin_,e connectio-vi betwee-_n the **cover** and the **cover** flap aiid ex_,ending f,.oni adjacent said hinge connection to inte-rsect s-,tid per,_oration line, aiid a pair of score lines lying one to each side of and at an aiigle with said second cut line and intersecting said second clit li-,ie adjacent said hinge copnectlon betvieen 'blie **cover** and the **cover** flap the carton bein.- elosed v_ith said **cover** - ',lap lying interiorly of the f-roiit wall aiid knife edge artd adjacent thereto, the portion 115 of sa-ld meanr, adjacent the hinge connection betw-een the **cover** and **cover** fla- ..) overlyiiig said knife edge, the portioii of said means defined -rrom said **cover** flap lying exteriorly of said liront wall and adhered thereto, the cartoi being operecl '2(by applying fi-ylger pressure oil said riie,,ins adjacer)t thL- intersection of spid seco,-q_t cut line witli sairj perforation line to pro,,-ress-1vely separate said rnear-s fror_i the cove,,-, aloiig said perforatioli Iiiie soid score lines provi_l,.inc., v_eak- __) ness lines serving as hinges for the ord,_-rly dowiimrard separatioii of the i- .near_s fror.-i the **cover**, said me_i_-.s bein.- severable from the -L_ront viall by co,.itinued pressure thereon iior,-nal to tl-ie front vvall to c.-,use separatioii at the adherence 31) colirle,_tion therebetiveen, the portion ol said meins defliied frorii the **cover** overlying said knife edge cluring su_-h s_-i_ara,-Lioii c-4 said means from thccover ancl severance of said w-eans from the froiit wa'l, to protect the firger f,.om in- 3 i-) jury, v,,hereby the cartoii may be ope,_ied to permit dsr,.ensing of the contained sheet rlaterial.



50) Family number: 22729539 (US2687478A)

Title:	RADIATION DETECTION DEVICE
Priority:	US19490118596 19490929 US19540444151 19540719

Family:

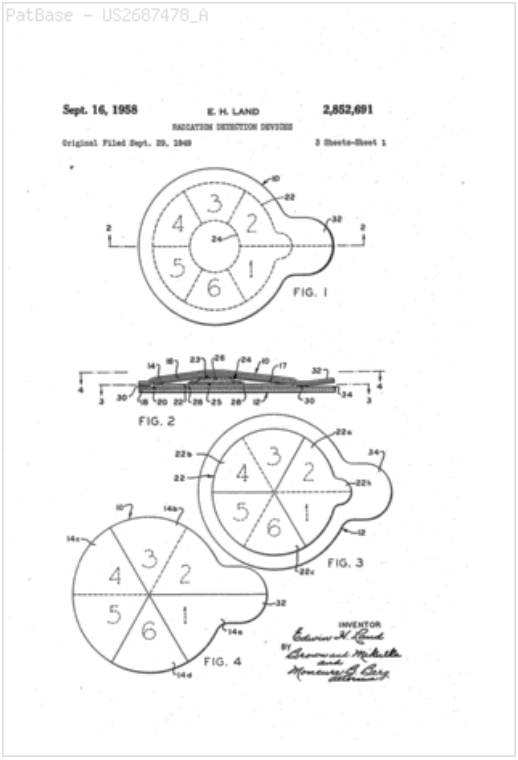
Publication number	Publication date	Application number	Application date
US2687478 A	19540824	US19490118596	19490929
US2852691 A	19580916	US19540444151	19540719

Probable Assignee:	POLAROID CORP
Assignee(s):(std):	POLAROID CORP
Inventor(s):(std):	LAND EDWIN H
International class (IPC 8-9):	G01T1/08 (Advanced/Invention); G01T1/02 (Core/Invention)
International class (IPC 1-7):	G01T1/08
CPC:	G01T1/08
European class:	G01T1/08
US class:	250/475.2 378/183 430/207 430/497 430/644

Classification Explorer

Cited documents:	US2687478 A, US2616051 A, US2557434 A, US2543181 A, US2500422 A, US2498741 A, US2496218 A, US2495113 A, US2495112 A, US2477291 A, US2467320 A, US2435718 A, US2435717 A, US2258593 A, US2209914 A, US2049497 A, US1902277 A, US1748490 A, US1592379 A, US1293323 A, GB456471 A, GB228279 A, DE567011 A,
Forward Citations:	WO13064615, USD683020, USD559985, US5083031, US4366225, US3427159, US3325642, US3196015, US3051837, US2994771, US2949880, US2917631, US2915393, US2852691, US2753460, US2007243016, EP2589985, DE1076833,

Abstract:
Source: US2687478A 1. A radiation detection **unit** comprising an envelope sufficiently small to fit into the mouth of a human being, said envelope having overlying wall members each of a deformable sheet material of a character transparent to radiation to be detected and substantially opaque to radiation of a wavelength within the visible spectrum and each providing a liquid-confining layer which is substantially impervious to liquid in the mouth of a human being and to liquid adapted to be released within the envelope, said liquid-confirv ing layers which provide said wall members being positioned one upon the other so that facing marginal portions thereof are substantially in iiat and face-to-face relation, **seal** means for releasably securing said overlying layers together and comprising an adhesive material which is substantially impervious to said liquids and which is located between otherwise unconnected marginal portions and which strippably secures said marginal portions in said flat face-to-face relation, an extension portion on each said liquidcarrying layer, said extension portions being in overlying relation and free of connection with each other and providing means for manually applying opposed forces in a direction away from the outer surfaces of said liquid-confining layers for rending the **seal** and stripping said layers apart, a radiation-sensitive layer responsive to nuclear radiation to be detected and capable of having a latent image formed therein upon exposure to said nuclear radiation, and a rupturable liquidcarrying **container** holding a liquid for processing said sensitive layer, said rupturable **container** and said sensitive layer being enclosed within said envelope and each being carried by one of said liquid-confining layers, said **container** being located relative to said sensitive layer in a position wherein the liquid content thereof will be discharged onto said radiation-sensitive layer upon rupture of said **container**, said **unit** containing within said envelope reagents in sufficient quantity to develop the latent image in the radiation-sensitive layer within said **unit** in accordance with the extent of the exposure thereof to said nuclear radiation, said reagents being rendered operative to perform said processing upon release of the liquid from the **container** by the rupture of said **container** by pressing the overlying wall members of said envelope toward each other, said **seal** means for releasably scouring said layers together being sufficiently strong to resist forces acting thereon the iupturc of said **container** and the release of its liquid content.



51) Family number: 25026921 (US2771850A)

© PatBase

Title: HIGH-PRESSURE HYDRAULIC PRESS

Priority: DE1953D014532 19530309 US19520275893 19520311

Family:

Publication number	Publication date	Application number	Application date
CH316862 A	19561031		19530311
DE1129916 B	19620524	DE1953D014532	19530309
FR1075570 A	19541018		19530310
GB733245 A	19550706	GB19530006427	19530309
US2771850 A	19561127	US19520275893	19520311

Probable Assignee: DOUGLAS AIRCRAFT CO INC

Assignee(s):(std)**:** DOUGLAS AIRCRAFT CO ; DOUGLAS AIRCRAFT CO INC ; DOUGLAS AIRCRAFT COMPANY

Assignee(s): DOUGLAS AIRCRAFT COMPANY INC

Inventor(s):(std)**:** ORVILLE ALBERT WHEELON ; WHEELON ORVILLE A ; WHEELON ORVILLE ALBERT

Inventor(s): ALBERT WHEELON ORVILLE

International class (IPC 8-9): B21D22/12 B30B5/02 (Advanced/Invention); B21D22/00 B30B5/00 (Core/Invention)

International class (IPC 1-7): B21D22/12 B30B5/02

CPC: Y10S425/019 B21D22/12 B30B5/02

European class: B21D22/12 B30B5/02

US class: 425/406 425/DIG.19 72/455 72/63 92/92

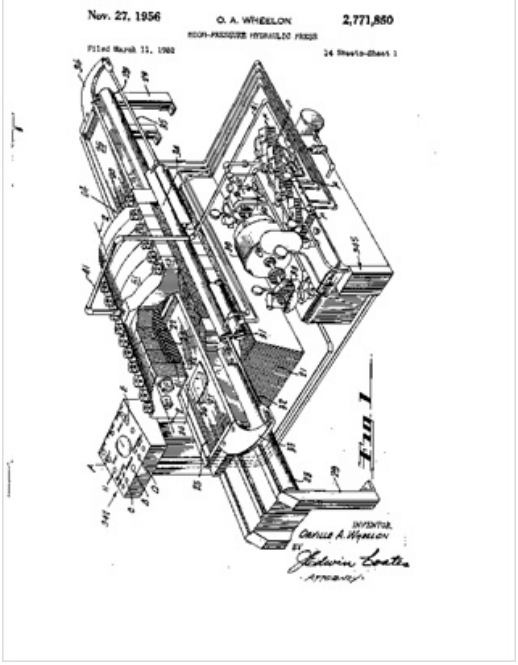
Classification Explorer

Cited documents: US2550672 A, US2493135 A, US2418393 A, US2385083 A, US2375599 A, US2317440 A, US2281133 A, US1330711 A, US1260002 A, US1177240 A, GB568734 A, FR892945 A, DE739693 A, DE465103 A, DE390330 A,

Forward Citations: WO9214933, WO03099484, WO0243890, US7461531, US7150177, US7150177, US7150171, US7127925, US5417144, US4711111, US4105388, US4080139, US3949583, US3938361, US3875778, US3585828, US3545241, US3222729, US3134148, US3120205, US3094956, US3033143, US3007427, US3006306, US2969031, US2962994, US2923130, US2908238, US2878767, US2854940, US2848968, US2006123863, US2004065138, US2004065137, US2004055480, US2004050263, FR2462262, FR2354159, FR2354159, EP0960717, DE3742541, DE1141967, CN102019317,

Abstract:
Source: GB733245A 733,245. **Stamping**. DOUGLAS AIRCRAFT CO., Inc. March 9, 1953 [March 11, 1952], No. 6427/53. Class 83 (4). A press for **stamping** sheet metal comprises a hollow **container** with two oppositely disposed surfaces, adjacent one of which is an inflatable **bag** by which an elastic pad is pressed on to the work resting on formers, the work and the formers being-inserted into the **container** through lateral **openings** and means being provided to prevent dislodgement during working. In one form, Figs. 1-3, a rigid bed 21 supports a **container** built up of upper and lower sections 52 held together by vertical bolts 54 and horizontal tie rods 56. At each end the **container** has an **opening** 24 through which platens 25 carrying formers 27 and sheet metal 26 may be moved into an out of operative position by means of rods 32, 35 secured to pistons within double-acting pressure-fluid cylinders 31, 34. Mounted within the upper part of the **container** is an elastic **bag** 22 adapted to have pressure fluid forced in or sucked out. through a.pipe 41 which may be connected through valve gear to pressure pump 37 or scavenging pump 38, both driven from a motor 39. Beneath the **bag** 22 is a relatively thick elastic pad 23 which is deformed by the **bag** so as to press the work to the external shape of the formers as shown in Fig. 2. The pad also bears on the bevelled edges of the platens, setting up equal and opposite outwardly directed forces which hold the platens in position. The **bag** conforms substantially to the interior shape of the **container**, a rigid fairing 63 of for example, glasscloth and plastic being interposed between the **bag** and the **container** at each end. Disposed within the **bag**. is a rigid plate 67 having a bossed aperture 68 into which is secured the. end of the pipe 41. This pipe also serves to suspend the plate and **bag** within the **container**. The pressure pad 23 has along each side a double bead 77 by which it is clamped between the upper and lower members 52 and at each end has a double head 79 by which it is gripped between upper and lower clamping members 81, 82, the latter being screwed to the upper members 52. Between the edge regions of the **bag** and pad may be inserted an elastic filler 30, Fig. 16. Each platen 25 comprises a concave tray formed by a base 102, Fig. 7, having bevelled side and end members 104, a centring groove 100 and a removable filler member 50. The end members serve to close the **openings** 24 when in operative position. In a modification, Fig. 18, the body of the press is formed from a number of one-piece sections 132 held together by the rods 137. The sides of the pad 23 are held between the upper interior surfaces of the sections and separate inserts 96 or alternatively lower **sealing** members 124 pressed upwardly by springs 123 in the members 96 may be used as shown in Fig. 9. In another modification, Fig. 19, the body of the press comprises a tubular shell 141 housing upper and lower members 142, 143 shaped to receive the pressureapplying means and the platens. In the form shown in Fig. 21, the press body comprises upper and lower cast members 151, 152 held together by bolts 158, each member being of less general thickness than in the preceding forms but having integral spaced reinforcing ribs. Fig. 22 shows another modification in which the **bag** and pressure pad are circular in plan and are mounted within an upper member 161 secured by bolts 163 to a lower member 162. These members are spaced apart by blocks 186 to provide room for four intermediate members 166 each having a concave work-receiving part 167 and a tailpart 168 by which it is pivoted to a block 186 so that it can be moved between an external loading and unloading position and a working position beneath the pressure pad. In operation the work is placed on the formers carried by the platens, the platens are moved into position beneath the pressure pad and pressure fluid is admitted to the **bag**.

PatBase - US2771850_A



52) Family number: 21582830 (US2697533A)

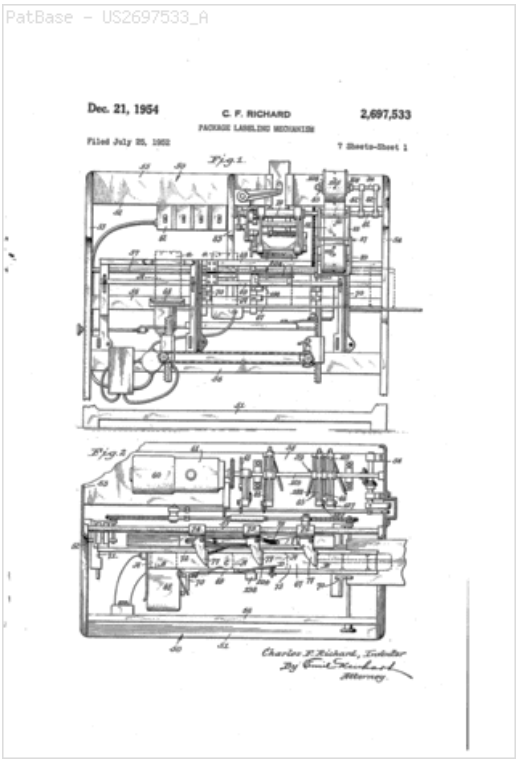
Title:	**PACKAGE LABELING** MECHANISM
Priority:	US19520300843 19520725

Family:

Publication number	Publication date	Application number	Application date
US2697533 A	19541221	US19520300843	19520725

Probable Assignee:	RICHARD CHARLES F
Assignee(s):(std):	RICHARD CHARLES F
Inventor(s):(std):	RICHARD CHARLES F
International class (IPC 8-9):	B65B51/06 (Advanced/Invention); B65B51/00 (Core/Invention)
International class (IPC 1-7):	B65B51/06 B65C5/00
CPC:	B65B51/06 Y10T156/1322
European class:	B65B51/06
US class:	156/367 156/486 156/517 156/DIG.19 53/136.5 53/138.3 53/415
Classification Explorer	
Cited documents:	US2543323 A, US2538520 A, US2417817 A, US2329669 A, US2293687 A, US2280730 A, US2244796 A, US2191535 A, US1289237 A,
Forward Citations:	US4876840, US3458969, US3146564, US2865152, US2763482,

Abstract:
Source: US2697533A (Claim 1) 1. **Labeling** mechanism for applying **labels** to **bags** or **packages** having upstanding folds closing the same, said mechanism comprising a pair of folder elements, a slender **label** support approximating in transverse dimen-. sion the thickness of said folds over each of which a piece of **labeling** material is placed lengthwise and under- neath which the upstanding fold of a closed **bag** or **package** containing a commodity is situated, means to move said folder elements to engage and fold portions of said piece of **labeling** material overhanging said **label** support while resting medially thereon, and means to move said 3o folder elements inwardly towards each other to fasten opposite portions of the folded **labeling** material against said upstanding fold.



53) Family number: 20068602 (US2702034A)

Title:	APPARATUS FOR COLLECTING, STORING, AND **DISPENSING** WHOLE BLOOD
Priority:	DE1957F022462 19570228 GB19550004177 19550211 US19500174891 19500720

Family:

Publication number	Publication date	Application number	Application date
BE617656 A7	19620831	BE19620617656	19620515
BE617656 Q	19620831	BE19620617656	19620515
DE1148707 B	19630516	DE1957F022462	19570228
GB803515 A	19581029	GB19550004177	19550211
US2702034 A	19550215	US19500174891	19500720

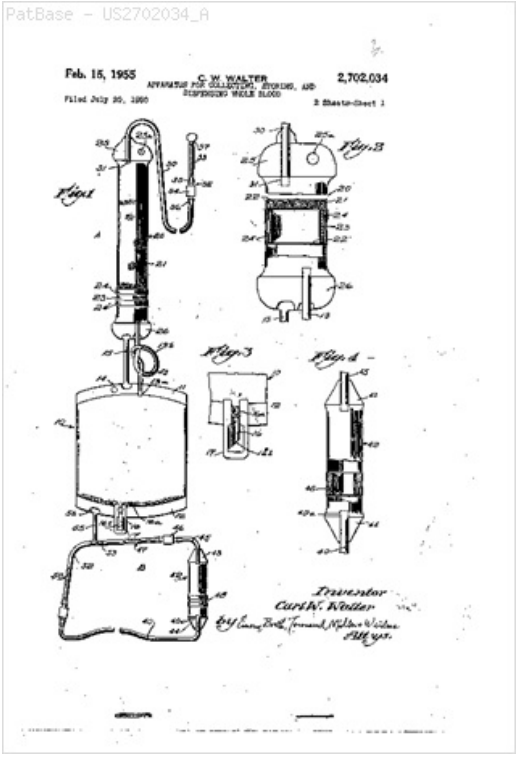
Probable Assignee:	FENWAL INC
Assignee(s):(std):	BAXTER LABORATORIES INC ; FENWAL INC ; FENWAL LAB INC
Assignee(s):	FENWAL LABORATORIES INC
Inventor(s):(std):	WALTER DR MED CARL WALDEMAR ; WALTER CARL WALDEMAR ; WALTER CARL W
Inventor(s):	CARL W WALTER
International class (IPC 8-9):	A61B5/15 A61M1/02 A61M1/36 A61M5/14 (Advanced/Invention); A61B5/15 A61M1/02 A61M1/36 A61M5/14 (Core/Invention)
International class (IPC 1-7):	A61L3/00 A61M1/02 A61M5/14 B29C17/07 B29C24/00
CPC:	Y10S215/03 A61B5/150282 A61B5/150305 A61B5/15032 A61B5/150328 A61B5/150335 A61B5/150519 A61B5/150587 A61B5/150717 A61J1/10 A61B5/15003 A61B5/150366 A61B5/150389 A61B5/150503 A61B5/150755 A61B5/150992 A61B5/153 A61M1/02 A61M1/3679 A61M1/3693 A61M5/14 A61M1/3696 A61M1/3695 A61M1/3672
European class:	A61B5/14B A61B5/153 A61B5/15B16 A61B5/15B18B10 A61B5/15B18B10D A61B5/15B18B2 A61B5/15B18D12F A61B5/15B18D6B A61B5/15B26 A61B5/15B2D A61B5/15B8R2 A61B5/15B8T A61B5/15B8V2 A61B5/15B8V4 A61B5/15B8V6 A61B5/15H A61J1/10 A61M1/02 A61M1/36Z A61M5/14 K61M1/36H K61M1/36P
US class:	206/438 210/257.1 210/282 210/687 215/399 215/DIG.3 383/38 494/18 494/38 514/645 604/252 604/262 604/408

Classification Explorer

Cited documents:	US2702034 A, US2678159 A, US2570639 A, US2512569 A, US2504482 A, US2409734 A, US2389355 A, US2367806 A, US2362537 A, US2341114 A, US2328569 A, US2253571 A, US2186987 A, US2129983 A, US2087780 A, US1863994 A, US1786090 A, US1703389 A, US1630248 A, GB765104 A, GB573611 A, DE632883 A, DE1723646 U,
Forward Citations:	WO8604818, WO05032715, WO05032715, WO04035114, WO04035114, US9796166, US9782707, US9743904, US9642591, US9636082, US9216242, US7169547, US7166084, US6994790, US6946842, US5789147, US4900321, US4898573, US4850954, US4820297, US4807676, US4786286, US4588401, US4557959, US4496361, US4495067, US4392851, US4392850, US4343409, US4332122, US4223675, US4116649, US3986506, US3870042, US3492991, US3451777, US3426745, US3416528, US3405706, US3337039, US3249295, US3244363, US3224586, US3224571, US3211368, US3196872, US3190547, US3190546, US3187750, US3171412, US3137387, US3133881, US3110308, US3101083, US3078847, US3064647, US3056403, US3054401, US3030955, US3030952, US3022784, US3009463, US3006341, US3004536, US3003500, US2952258, US2950716, US2940444, US2929378, US2900979, US2896619, US2894510, US2893547, US2886035, US2883985, US2854002, US2845929, US2838046, US2834345, US2820689, US2815025, US2803365, US2802448, US2768106, US2765923, US2011180566, US2011178425, US2011144596, US2010222702, US2009187117, US2007179424, US2007106196, US2005274673, US2004251905, US2004073192, US2003146170, US2002151834, FR2519554, EP0038339, DE1148707, DE1138186, DE1129258, DE1123800, DE1078288, DE1065138, DE1042837,

Abstract:
Source: GB803515A 803,515. Making surgical instruments. FENWAL LABORATORIES, Inc. Feb. 11, 1955, No. 4177/55. Class 87(2). [Also in Group VI] A blood **container** 10 comprises a tube-form length of flexible synthetic plastic having the respective ends 11, 12 flattened and **sealed**, a tubular **sealable** inlet port 13 and a tubular outlet port 16 of like material extending through and **sealed** into a **sealed** end of the **container**, the outlet port 16 containing a sterile **seal** 16a and having an operably **covered** externally projecting portion 16b. A blood **storage** **bag** 10 is made of flexible synthetic plastic, e.g. polyvinyl chloride base material, a polyethylene. composition or a polymer of trichlorofluoroethylene. The tubing is formed either by extrusion or by marginally **sealing** superposed layers of sheet material. The ends of the tubing 11, 12 are transversely **sealed** by heating to melting point, inlet and outlet tubes 13, 16 being simultaneously **sealed** in position. **Containers** 20, 42 for blood anticoagulant or filtering means are made in a similar way. Needles of the hypodermic type which are connected to the **bag** 10 by flexible tubing (see Group VI) comprise a stainless steel or synthetic resin cannula 110 pointed at one end and around which a hub 120a of nylon is moulded. A mould 130 for this purpose comprises separable mating portions 131, 132 which together form a cavity in the shape of the hub 120a. Part of the cannula 110 is introduced into the cavity which is filled through a spine 134. The moulded hub 120a comprises a central portion 121a of polygonal cross-section which has at each end conical portions 122a, 123a, the conical portion 123a nearer the cannula point having a steeper taper than the other conical portion 122a. Indicia appropriate to the needle may be applied to the hub during the moulding operation.

PatBase - US2702034_A



54) Family number: 22022232 (US2758670A)

Title: ADJUSTABLE CONTROL FOR AUTOMATIC VACUUM CLEANERS

Priority: US19540403977 19540114 US19540407096 19540129 US19540424547 19540421 US19540421481 19540407

Family:

Publication number	Publication date	Application number	Application date
DE1186992 B	19650211	DE1955E010090	19550113
DE1428391 A1	19690529	DE19551428391	19550113
DE1428391 B2	19701126	DE19551428391	19550113
FR1120551 A	19560709		19550113
GB764512 A	19561228	GB19550000174	19550104
NL193907 A	00000000		00000000
NL97200 C	00000000		00000000
US2714425 A	19550802	US19540424547	19540421
US2715946 A	19550823	US19540403977	19540114
US2741328 A	19560410	US19540421481	19540407
US2758670 A	19560814	US19540407096	19540129

Probable Assignee: ELECTROLUX AB

Assignee(s):(std)**:** CONS FOODS CORP ; ELECTROLUX AB ; ELECTROLUX CORP

Assignee(s): CONSOLIDATED FOODS CORP

Inventor(s):(std)**:** T FERRARIS JOHN ; PRETLOW ALLEN ; PETERSON AXEL ; KOSIK JR JOHN ; KOSIK JOHN ; JUN JOHN KOSIK ; FERRARIS JOHN TEREZIO ; FERRARIS JOHN T ; DOUGHMAN FERMAN CARSON ; DOUGHMAN FERMAN C ; DOUGHMAN CARSON ; CAWL ALLEN P ; AXEL PETERSON

Inventor(s): JR JOHN KOSIK

International class (IPC 8-9): A47L9/00 A47L9/10 A47L9/19 (Advanced/Invention); A47L9/00 A47L9/10 (Core/Invention)

International class (IPC 1-7): A47L9/10

CPC: Y10S55/34 A47L9/0072 A47L9/19 A47L9/1481 Y10T137/7744

European class: A47L9/00C A47L9/14E A47L9/19

US class: 137/475 15/319 200/83R 55/DIG.34 96/398 96/403

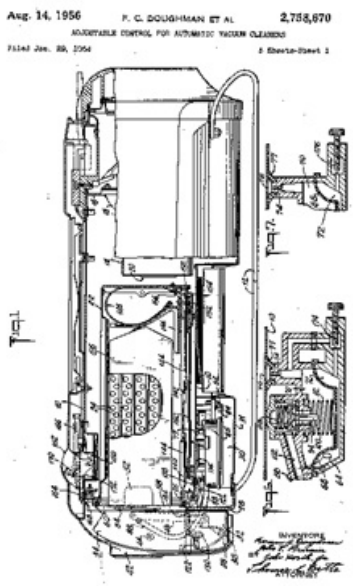
Classification Explorer

Cited documents: US2646855 A, US2641330 A, US2622399 A, US2580643 A, US2569222 A, US2518244 A, US2477801 A, US2466441 A, US2369222 A, US2331826 A, US2200599 A, US1947447 A, US1715273 A, GB362924 A, DE947513 A, DE761793 A, DE678608 A,

Forward Citations: WO15074560, US8551234, US6571422, US5062870, US4859218, US4124916, US3304385, US3172743, US3069068, US2814358, US2011056380, FR2438995, FR2414324, EP0327937, EP0327937, DE3316643, DE1267389, DE1156206,

Abstract:
Source: GB764512A 764,512. Suction cleaners. ELECTROLUX CORPORATION. Jan. 4, 1955 [Jan. 14, 1954; Jan. 29, 1954: April 7, 1954; April 21, 1954], No. 174/55. Classes 8(1) and 8(2) A suction cleaner of the automatic type utilizing a differential pressure diaphragm or equivalent member subjected on one side to the pressure prevailing on the intake side of a filter **bag** and on the other side to the suction effect of the fan on the other side of the filter **bag** whereby a predetermined increase in the pressure drop across the filter due to clogging is utilized to operate control mechanism to give a warning of operational inefficiency, is characterized by the provision of an adjustment member accessible from the exterior of the cleaner and operable for varying the pressure drop applied to the diaphragm. A control housing 26 secured to the cleaner casing 10 encloses a differential pressure chamber member 58, a pneumatic power member 60 and an electro-magnetic valve member 62. The member 58 houses the differential pressure diaphragm 66 which is subjected on its upper side to the pressure prevailing in the suction inlet port through a pipe 68 and on its lower side with the pressure prevailing in the housing 10 outside the filter **bag** through an **opening** 80 and a pipe 72 which is also connected to the valve 60. The diaphragm 66 carries a contact 88 and is biased to the upper position by a spring 86 which connects the contact 88 to an electrical lead 96. A longitudinally and rotatably moveable member 98 carries a second contact 100 and is electrically connected to a lead 104 and is operable by means of an external knob 112 by means of which the contact 100 may be brought closer to the contact 88. When sufficient pressure differential exists the contacts 88, 100 engage and the solenoid 118 of the valve 62 is energized and the valve 122 **opens** to connect the pipe 126 to the full suction pressure existing in the pipe 72 The pipe 126 is connected to the chamber 130, Fig. 4, of the power member 60 which chamber is closed by diaphragm 128 the upper side of which is subjected to atmospheric pressure and is connected to a stem 132 which engages a pivoted plate 136 which when the stem 132 moves down releases the catch securing the end **cover** of the housing 10 which then **opens** and at the same time withdraws a pin 154 which releases a catch device whereby a spring injects the filter **bag** from the housing. The effect of the spring 86 towards the end of the downward movement of the diaphragm 66 is increased by means of spring tongues 202. In a modification the electro-magnetic valve 62 is replaced by a valve which is directly actuated by the diaphragm 66. The pressure at which this valve is **opened** is controlled by bleeding atmospheric air to one or other side of the diaphragm 66 through a manually controlled valve. In a modification of this directly actuated valve the pressure at which the valve will operate is controlled by varying the distance between the stem of the valve and the point of contact with the diaphragm 66. In a further modification the function of the diaphragm 66 is combined with that of the power member. the diaphragm. 66 carrying a slide valve which when the diaphragm has moved sufficiently allows full atmospheric pressure to reach one side of the diaphragm while the other side is subjected to full suction pressure. **Opening** of the end **cover** of the housing 10 is arranged to actuate the control switch to switch off the motor. Specifications 682,845, 712,233 and 724,179 are referred to.

PatBase - US2758670_A



55) Family number: 30171730 (US4170315A)

Title: **Closure** for rigid and deformable **containers**

Priority: 19540317 CA19780296766 19780210 CH19770001611 19770210 CH19770009115 19770722

Family:

Publication number	Publication date	Application number	Application date
AT381289 B	19860925	AT19780000906	19780209
AT90678 A	19860215	AT19780000906	19780209
AU197833214 A1	19790816	AU19780033214	19780210
AU516966 B2	19810702	AU19780033214	19780210
BE530735 A	00000000		00000000
BE863812 A	19780529	BE19780185042	19780209
BR7800801 A	19780919	BR19780000801	19780210
CA1108557 A1	19810908	CA19780296766	19780210
CH611225 A	19790531	CH19770001611	19770210
CH619413 A	19800930	CH19770009115	19770722
DE2805046 A1	19780817	DE19782805046	19780207
DE2805046 C2	19880121	DE19782805046	19780207
DK153133 B	19880620	DK19780000565	19780208
DK153133 C	19881121	DK19780000565	19780208
DK56578 A	19780811	DK19780000565	19780208
ES467145 A1	19790601	ES19780467145	19780209
FR1101233 A	19551004		19540317
FR2380195 A1	19780908	FR19780003713	19780209
FR2380195 B1	19840504	FR19780003713	19780209
GB1567724 A	19800521	GB19780005494	19780210
GB748061 A	19560418	GB19540017151	19540610
IT1101779 A	19851007	IT19780048009	19780210
IT7848009 A0	19780210	IT19780048009	19780210
JP54040778 A2	19790330	JP19780014798	19780210
LU33026 A	00000000		00000000
NL189557 B	19921216	NL19780001511	19780209
NL189557 C	00000000	NL19780001511	19780209
NL7801511 A	19780814	NL19780001511	19780209
SE434253 B	19840716	SE19780001465	19780208
SE434253 C	19841025	SE19780001465	19780208
SE7801465 A	19780811	SE19780001465D	19780208
US4170315 A	19791009	US19780876734	19780210
YU28378 A	19821031	YU19780000283	19780207
ZA7800827 A	19790131	ZA19780000827	19780210

Probable Assignee: CREATECHNIC PATENT AG

Assignee(s):(std)**:** CREATECHNIC PATENT AG ; CREATECHNIC PATENT AG TE WALLISELLEN ZWITSERLAND ; CREATECHNIK PATENT AG ; KURIEITEKUNITSUKU PATENTO AG ; PAINES AND BYRNE LTD

Assignee(s): KESSLER HANSRUEDI ; PAINES AND BYRNE LIMITED ; DUBACH WERNER F ; CREATECHNIC PATENT AG DIETLIKON CH ; CREATECHNIC PATENT A G

Inventor(s):(std)**:** DUBACH WF ; W F DUBACH ; WALTER F DUBACH ; WERNER F DUBACH ; CARBONNEL ROGER ; KESSLER HANSRUEDI ; KESSLER H ; HANSURIYUEDEI KESURAA ; DUBACH WERNER FRITZ ; DUBACH WERNER F ; DUBACH WALTER F ; DUBACH W F ; DUBACH W ; BERUNERU EFU DEYUBATSUKU ; H KESSLER ; HANSRUEDI KESSLER ; WF DUBACH

Inventor(s): WERNER F DUBACH ET HANSRUEDI KESSLER ; KESSLER HANSRUEDI HALLAU CH ; WERNER FRITZ DUBACH ; F DUBACH WERNER ; DUBACH W F AND KESSLER H ; DUBACH WERNER F WALLISELLEN CH

Agent(s): GH; SWABEY OGILVY RENAULT

International class (IPC 8-9): B65D43/04 B65D43/16 B65D47/08 B65D47/14 C11D17/04 (Advanced/Invention); B65D43/02 B65D47/08 B65D47/12 C11D17/04 (Core/Invention)

International class (IPC 1-7): B65D11/00 B65D41/00 B65D41/18 B65D41/22 B65D41/30 B65D43/04 B65D43/16 B65D47/06 B65D47/08 B65D51/04 B65D51/18 B65D55/02 B67B3/22 C11D17/04 F16J13/04

CPC: B65D47/0814 B65D47/0838 B65D47/14 B65D2101/0023 B65D2251/1016 C11D17/041 C11D17/049

European class: B65D47/08B1A B65D47/08B4C B65D47/14 C11D17/04B C11D17/04F L65D101/00A3 L65D251/10D

US class: 220/281 220/375 220/835 220/837 220/838 222/153.06 D9/439

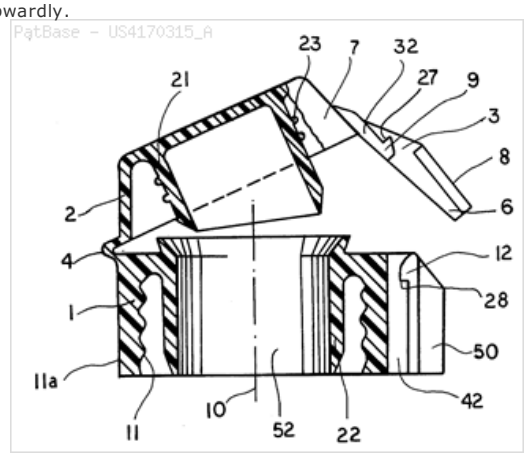
Classification Explorer

Cited documents: US4022352 A, US4002275 A, US3986627 A, US3907146 A, US3873006 A, US3826394 A, US3603470 A, US3374912 A, US3103691 A, DE2155664 A1, DE2147038 A1, AT313093 B,

Forward Citations: WO9749615, WO9426611, WO9404427, WO8801972, WO11056814, WO11022797, WO07062006, WO07062006, WO06083606, WO05123526, WO05123526, USD732822, USD716660, USD714144, USD679181, USD596029, USD582274, USD582273, USD533452, USD532691, USD532298, USD530610, USD513452, USD509426, USD441292, USD440494, USD438801, USD426464, US9868572, US9738426, US9475623, US9469453, US9382045, US9150339, US9120606, US8955705, US8899437, US8807359, US8651335, US8596493, US8505188, US8469212, US8308004, US8292101, US8245868, US8066158, US7861873, US7735665, US7721907, US7654411, US7581656, US7404495, US7374053, US7137845, US7137845, US7134575, US7074071, US7000792, US6976607, US6866164, US6854619, US6772902, US6729497, US6691901, US6679403, US6631820, US6572156, US6412664, US6405885, US5913435, US5875907, US5860543, US5853093, US5829610, US5735424, US5695062, US5683016, US5636740, US5489035, US5462183, US5427260, US5356026, US5356017, US5301849, US5242696, US5201440, US5141138, US5137260, US5110004, US5108029, US5065911, US5038957, US5031784, US5013073, US4982882, US4971220, US4925041, US4854473, US4809874, US4787526, US4786380, US4406386, US4293079, US4220262, US2017008678, US2016130049, US2015329252, US2015108167, US2014144867, US2013175271, US2012273523, US2011114591, US2010140283, US2010051573, US2010018997, US2009314792, US2009260996, US2009255962, US2008277368, US2008142468, US2008011761, US2007228079, US2007125741, US2007114201, US2007068977, US2006186077, US2006011573, US2006000833, US2005260882, US2005218105, US2005133475, US2005023285, US2004238553, US2004166719, US2004074919, US2004069806, US2003205549, US2003071041,

NL1003424, JP63040351, JP61268325, JP61268324, JP61268322, JP61093456, JP61077350, JP6103929, JP60501553, JP59112092, JP55005400, JP2014125256, GB2234497, GB2218430, GB2210892, GB2163947, FR2604154, EP1452457, EP0916588, EP0912414, EP0844190, EP0795483, EP0649380, EP0649380, EP0649380, EP0345394, EP0262033, EP0151242, EP0151242, EP0084617, EP0006512, DE4127855, DE3638971, DE3416579, DE20117343, DE102005059675, DE102005059675, CN102941966, CN102941966, CN102596745, CN102596745, AU2005274936, AU2005274936,

Abstract:
Source: US4170315A A **closure** of synthetic resin material has a cap connected to a base which fits onto the **container** by a hinge joint which may be of the flexible film type and can be molded unitarily with the base and cap. On the opposite side of the cap from the hinge, there is provided a lever which has a pressing plate and a hook, the latter being engageable with a detent on the base so that entered pressure on the plate allows the cap to swing upwardly.



56) Family number: 22443871 (US2722084A)

© PatBase

Title: Mold mechanisms for glass machines

Priority: US19460688470 19460805 US19510257021 19511119 US19510257022 19511119

Family:

Publication number	Publication date	Application number	Application date
US2722084 A	19551101	US19510257022	19511119
US2757484 A	19560807	US19510257021	19511119
US2811814 A	19571105	US19460688470	19460805

Probable Assignee: HENRY C DAUBENSPECK

Assignee(s):(std)**:** HENRY C DAUBENSPECK

Inventor(s):(std)**:** WINDER SAMUEL E

International class (IPC 8-9): C03B9/18 (Advanced/Invention); C03B9/00 (Core/Invention)

International class (IPC 1-7): C03B9/18

CPC: C03B9/18

European class: C03B9/18

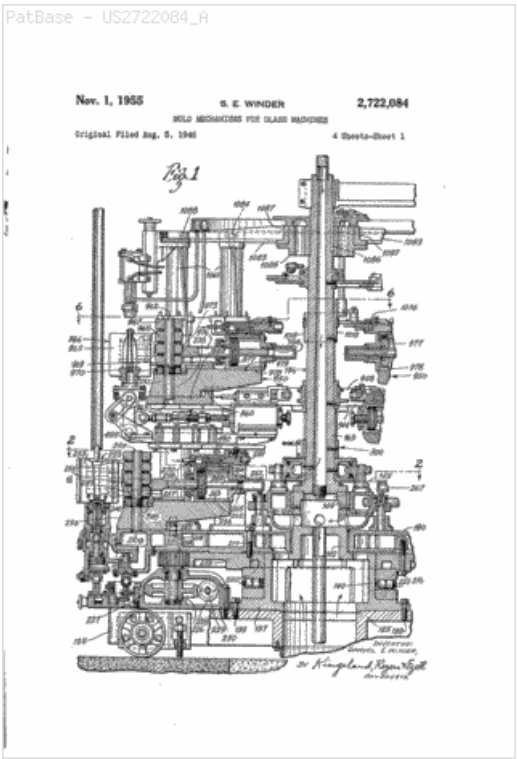
US class: 414/744.8 65/167 65/171 65/173 65/237 65/239 65/305 65/338 65/355 65/361

Classification Explorer

Cited documents: US927593 A, US869538 A, US806669 A, US791410 A, US744007 A, US2508890 A, US2466669 A, US2398465 A, US2388876 A, US2376928 A, US2362427 A, US2328873 A, US2314290 A, US2289046 A, US2278572 A, US2269391 A, US2259991 A, US2254992 A, US2205261 A, US2188108 A, US2161255 A, US2129614 A, US2123145 A, US2069130 A, US2063463 A, US2059546 A, US2043065 A, US2031739 A, US2018030 A, US2018021 A, US2011187 A, US2002213 A, US1992951 A, US1968777 A, US1959428 A, US1957410 A, US1956203 A, US1945985 A, US1943483 A, US1931375 A, US1929842 A, US1911119 A, US1875818 A, US1869249 A, US1868248 A, US1843160 A, US1826019 A, US1792988 A, US1740310 A, US1739845 A, US1737524 A, US1729363 A, US1718651 A, US1693069 A, US1689407 A, US1680544 A, US1679502 A, US1670821 A, US1654731 A, US1648792 A, US1647532 A, US1499522 A, US1490182 A, US1458454 A, US1385428 A, US1353986 A, US1329253 A, US1277607 A, US1255317 A, US1241516 A, US1228469 A, US1205354 A, US1105510 A, US1072553 A, GB164254 A, DK47140 A,

Forward Citations: WO8403501, WO8403499, US4528017, US4432783, US4339264, US4226607, US4203749, US3839004, US3642462, US3528793, US3479173, US3424569, US3141755, US3015189, EP0118298, EP0118298,

Abstract:
Source: US2722084A (Claim 1) 1. In a glass machine of the type having a plurality 2_3 of blank and finish molds supported on a common base and an individual cylinder for each mold, the combination of an individual block for removably mountiiig each associated mold and cylinder, said blocks being identical for free interchange between molds and cylinders, means ',(including a mold hinge pin accurately located and secured in each of said block for accurately locating an associated mold thereon, and means including accurately located interlockin-,Iy engageable surfaces on each block and each cylinder extending in at least two mutually 3,5 perpendicular directions for accurately locating and aligning the cylinders on their associated blocks in predetermined relatiol to the respectively associated molds.



57) Family number: 22168956 (US2743968A)

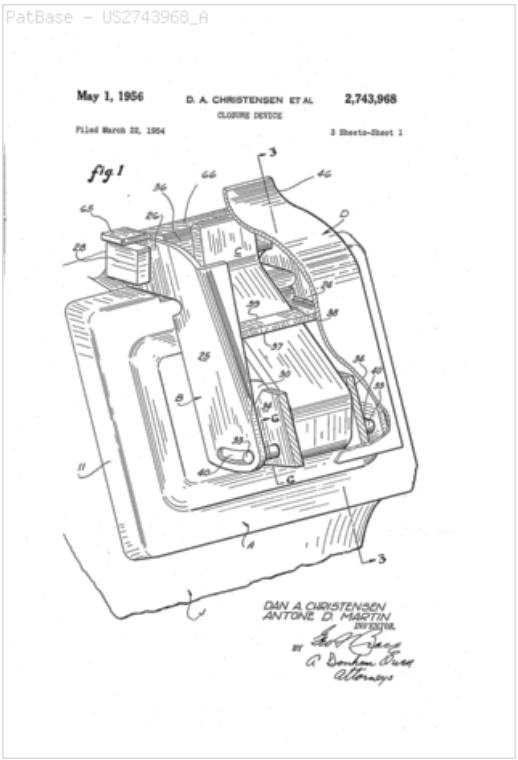
Title:	**CLOSURE** DEVICE
Priority:	US19540417692 19540322

Family:

Publication number	Publication date	Application number	Application date
US2743968 A	19560501	US19540417692	19540322

Probable Assignee:	NAT MOTOR BEARING CO INC
Assignee(s):(std):	NAT MOTOR BEARING CO INC
Assignee(s):	NATIONAL MOTOR BEARING CO ; NATIONAL MOTOR BEARING CO INC
Inventor(s):(std):	CHRISTENSEN DAN A ; MARTIN ANTONE D
International class (IPC 8-9):	B61F15/26 (Advanced/Invention); B61F15/00 (Core/Invention)
International class (IPC 1-7):	B61F15/26
CPC:	B61F15/26
European class:	B61F15/26
US class:	220/324 384/190.3
Classification Explorer	
Cited documents:	US2191761 A, US2014582 A, AU263426 A1,
Forward Citations:	US3435981, US3062595, US2962326, US2906566,

Abstract:
Source: US2743968A (Claim 1) 1. In combination with a lubricant conta;ner having an entrance' a **cover** device ad4pted to provide a leak tight **seal** for said entrance comprising a lid corresponding in sh,-,pe to the entranc.- of the **container**, IlirA,-e m-_ans having a hinge p:vo-t by ;,/hich it is pivoted on said **container** and having mlans by which it is pivotally secured to said lid, a flat sprin.- slidin.-ly mounted in said hinge means having one end positioned to en,_a._e said coritainer at a point offset from said hinge pivot, and lever means SCcured to the otlier end ol' said sprin._ and O'Perable to engage said hinge _-neai-_s to pry sa;d last mentioned end o-f sa;d sprin,_ ,wgv from the pivotal lid means ancl said one elid of said spring is forced into operative engagemeiit with said **container** to hold the lid firmly closed.



58) Family number: 22389630 (US2765605A)

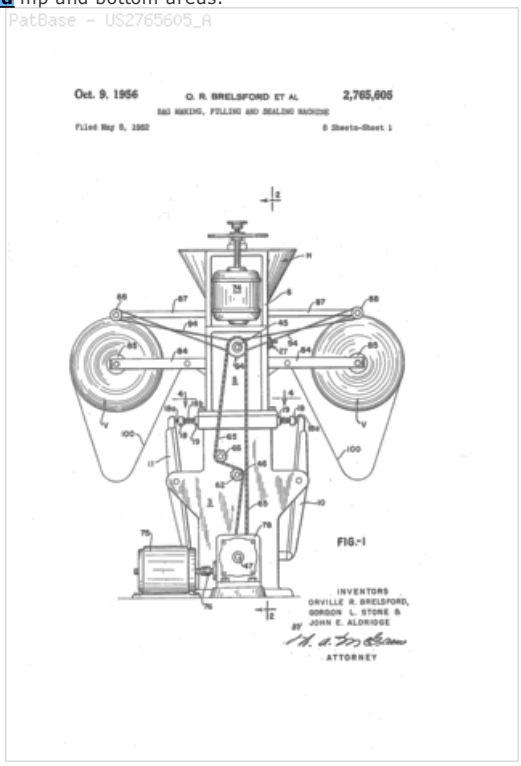
Title:	BAG MAKING, FILLING AND SEALING MACHINE
Priority:	US19520286698 19520508

Family:

Publication number	Publication date	Application number	Application date
US2765605 A	19561009	US19520286698	19520508

Probable Assignee:	CUP BREW COFFEE BAG CO
Assignee(s):(std):	CUP BREW COFFEE BAG CO ; CUP BREW COFFEE BAG COMPANY
Inventor(s):(std):	ALDRIDGE JOHN E ; BRELSFORD ORVILLE R ; STONE GORDON L
International class (IPC 8-9):	B65B29/02 (Advanced/Invention); B65B29/00 (Core/Invention)
International class (IPC 1-7):	B65B29/02
CPC:	B65B29/02 Y10T83/2166
European class:	B65B29/02
US class:	53/554 53/575 83/143
Classification Explorer	
Cited documents:	US529908 A, US2385229 A, US2381091 A, US2350930 A, US2336962 A,
Forward Citations:	US5465555, US4524567, US3257128, US3188781, US3007359,

Abstract:
Source: US2765605A (Claim 1) We claim: l. In a machine for producing **sealed** unitary **containers** of fluent material having a supporting structure, the combination of a **storage** receptacle for Huent material to be **packaged** mourned at the upper portion of said structure and having a bottom discharge **opening**, a fccd screw positioned to move liucnt matter through said **opening** for gravitational discharge, a centrifugal measuring device having an upper intake **opening** for the reception of a measured amount of the discharge of Huent matter through said discharge **opening** in each revolution and having a lower discharge outlet for the passage of said measured amount in each revolution and having a rotor for moving the measured amount from the intake to the outlet, means associated with said rotor for directing an air blast discharge to 'thc -tiuent matter in the rotor when the same is in registry with the discharge outlet, an elongated hollow loading and shaping device positioned and arranged to receive and conduct said measured discharge to a remote point of discharge between enclosing media, means for positioning two strips of heat scalable enclosing media separated by the loading and shaping device at said point of discharge with a **unit** defined by abutting side and bottom surfaces heat **sealed** by **sealing** action on the next lower **unit** along the strips, means for imparting unitary increments of movement to said strips so as to bring the filled enclosure out of register with said loading and shaping device, co-active die members positioned on said structure for movement into heat **sealing** engagement with the filled enclosure at -the end of said increment of movement and arranged to heat-**seal** the top of the tilled enclosure to form the unitary **container** and simultaneously heat-**seal** the bottom and sides of the enclosure next above, and means positioned along the path of movement of said **units** for severing the respective strips in the **sealed** mp and bottom areas.



59) Family number: 22397800 (US2765974A)

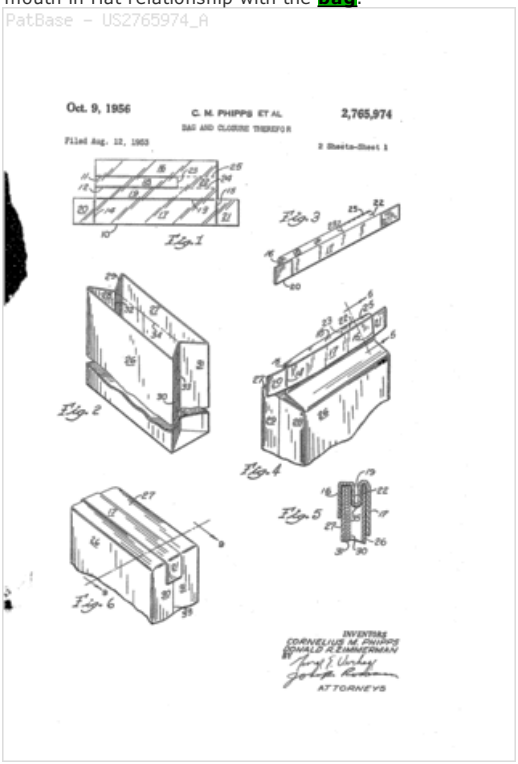
Title:	**BAG** AND **CLOSURE** THEREFOR
Priority:	US19530373752 19530812

Family:

Publication number	Publication date	Application number	Application date
US2765974 A	19561009	US19530373752	19530812

Probable Assignee:	MARATHON CORP
Assignee(s):(std):	MARATHON CORP
Inventor(s):(std):	PHIPPS CORNELIUS M ; ZIMMERMAN DONALD R
International class (IPC 8-9):	B65D77/12 (Advanced/Invention); B65D77/10 (Core/Invention)
International class (IPC 1-7):	B65D33/20 B65D5/26 B65D5/70
CPC:	Y10S383/906 B65D77/12
European class:	B65D77/12
US class:	383/203 383/78 383/83 383/906
Classification Explorer	
Cited documents:	US2721023 A, US2373744 A, US2197490 A, US2188039 A, GB320289 A, DE511103 A, AT123671 B, AT123671,
Forward Citations:	US5823685, US4801078, US3073507,

Abstract:
Source: US2765974A (Claim 1) 1. We claim: l. In combination, an article-containing **bag** and a **closure** therefor, the **bag** having a pair of opposite main panels and a pair of in\vardly»folded bellows panels connecting the side edges of said main panels to form the side walls of the **bag**, the **closure** comprising a flexible blank divided by score lines into a pair of inner panels, a pair of outer panels, and a pair of **tabs** each connected to a side edge of one of said outer panels, a lateral portion of one of said inner panels being defined by perfo» rations, the blank having an adhesive on one surface thereof, the inncr panels being folded to have their ad» herent-free surfaces in face-to-face relation, the inner panels lying and adhered within the **open** mouth of the **bag** with the adherent surface of the other of said inner panels in faee~to-face adhering relation with one of said main **bag** panels and the adherent surface of said one inner panel in faceato-face adhering relation with the inner surface of the bellows panels connected to said one main panel of the **bag**, the outer panels being folded to overlie the main panels of the **bag** with their adherent surfaces in face-to-face adhering relation therewith adjacent the mouth of the **bag**, the **closure** being adhered to close the mouth of the **bag**, the thus»closed **bag** mouth being laid over dat against the **bag** end with the outer surface of the outer panel to which said one inner panel is connected in f2tee~to-face relation with the adjacent main panel of the **bag**. and said **tabs** being adhered to the sides of thc **bag** to retain the thus»elosed **bag** mouth in Hat relationship with the **bag**.



60) Family number: 22528710 (US2773631A)

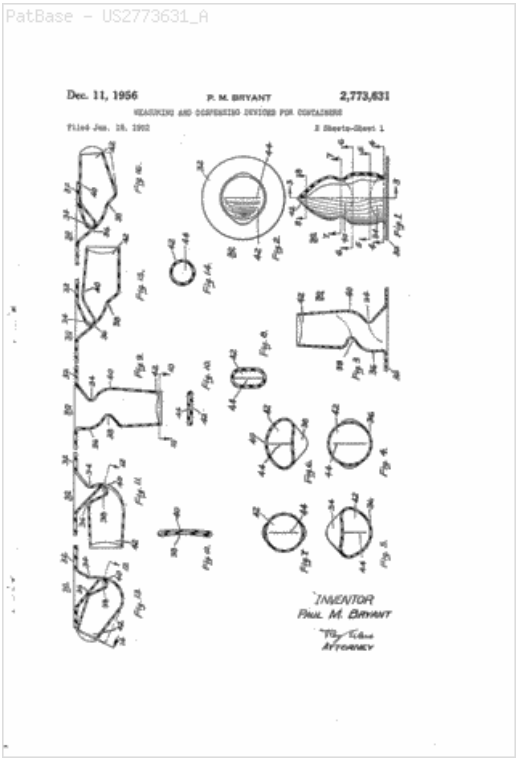
Title:	MEASURING AND **DISPENSING** DEVICES FOR **CONTAINERS**
Priority:	US19520266671 19520116

Family:

Publication number	Publication date	Application number	Application date
US2773631 A	19561211	US19520266671	19520116

Probable Assignee:	BRYANT PAUL M
Assignee(s):(std):	BRYANT PAUL M
Inventor(s):(std):	BRYANT PAUL M
International class (IPC 8-9):	B65D47/22 G01F11/00 (Advanced/Invention); B65D47/04 G01F11/00 (Core/Invention)
International class (IPC 1-7):	B65D35/40 B65D47/22 B65D47/26 B65D8/02
CPC:	G01F11/00
European class:	G01F11/00
US class:	222/430 222/450 222/490 222/528
Classification Explorer	
Cited documents:	US66212 A, US570759 A, US2661128 A, US2574931 A, US2561596 A, US2554050 A, US2543470 A, US2113022 A,
Forward Citations:	WO04041326, WO04041326, US8408208, US8308028, US7814900, US7721731, US6422234, US5624062, US5131571, US3628705, US3181743, US3045880, US2950029, US2893611, DE4313319, DE4111895, DE3409867,

Abstract:
Source: US2773631A (Claim 1) 1. A measuring and **dispensing** device for **containers** that can he associated with a **container** to selectively permit or prevent the flow of material from said **container** and that comprises an elongated, thin-walled tube of Hexihlo material, said tube having a lower end securable to a **container** and an upper end spaced from said **container**, an **opening** at the lower end of said tube, a **closure** at the upper end of said tube, a normally closed aperture in said **closure**, said tube having a horizontally-directed cross~section in the wall thereof that is spaced from said upper end and is elongated in one direction, said tube having a second horizontally-directed cross-section in the wall thereof that is spaced from the first said cross~section and said upper cnd and that is elongated in a direction which is anguiarly spaced from the first said direction, said cross-sections normally bounding areas of substantially equal size, said second cross-section having one edge thereof defined by a reentraut portion of the wall of said tube, said reentrant portion of the wall of said tube constituting a bending line for said tube, said reentraut portion of the wall of said tube defining a convex surface at the interior of said tube which projects inwardly toward the longitudinal center of said tube and which can selectively approach the oppositely disposed portion of the wall of said tube to prevent flow of material past said second cross section, said tube being bendable about said bending line to reduce the area defined by said second cross-section to a value that will prevent How of material from said **container**-past said second cross-section, said reentraut portion of the wall of said tube automatically bowing inwardly and moving said bending line toward said oppositely disposed portion of the wall of the tube as said tube bonds about said bending Line, said aperture in said **closure** being **openable** by distortion of said **closure**, said reentraut portion of Lhe wall of said tube being in part conoidal in configuration.



61) Family number: 19523961 (GB763738A)

Title:	Improvements relating to **packages** of fluent materials and to their method of manufacture
Priority:	19531019

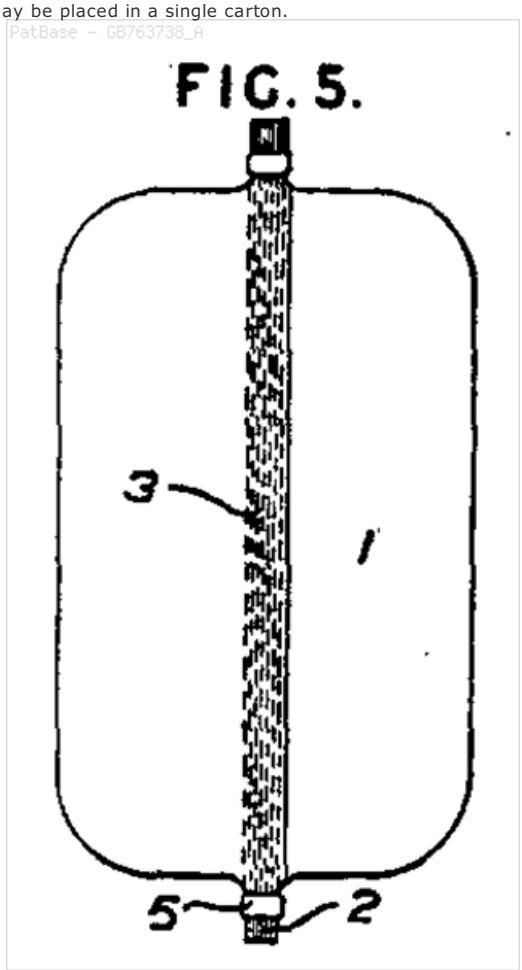
Family:

Publication number	Publication date	Application number	Application date
FR1131065 A	19570215		19540517
GB763738 A	19561219	GB19540009407	19540331

Probable Assignee:	WINGFOOT CORP
Assignee(s):(std):	WINGFOOT CORP
International class (IPC 8-9):	B65D30/00 B65D77/06 B65D77/10 (Advanced/Invention); B65D30/00 B65D77/06 B65D77/10 (Core/Invention)
International class (IPC 1-7):	B65D3/22 B65D31/10 B65D5/22 B65D75/12
CPC:	B65D31/00 B65D77/06 B65D77/10
European class:	B65D31/00 B65D77/06 B65D77/10

Classification Explorer

Abstract:
Source: GB763738A 763,738. Paper c. **bags**; **packaging**. WINGFOOT CORPORATION. March 31, 1954 [Oct. 19, 1953], No. 9407/54. Classes 66, 94(1) and 94(2). A **package** of fluent material e.g. oil is formed by **sealing** together the opposed inner surfaces at one end of a tube of film, gathering the **sealed** end 2, encircling it with a band 5 disposed at least in part inwardly of the **seal**, filling the **container** with oil, c., and **sealing** and binding the other end in the same way. The band which may be of metal or string prevents the the pressure of the contents from **opening** the **seal**. The tube may have a longitudinal **seal** 3 at the centre as shown or at the edge of the **bag**, or may be formed by spirally winding a strip. Multi-ply tubes may be used with a liquid plasticizer e.g. ethylene glycol or a mixture of gasoline and dibutyl phthalate between the plies. When three plies are used the plasticizer may be provided between the outermost plies and dissolve into the intermediate ply to migrate to the innermost ply. The **bags** may be packed individually into drums, or several **bags** may be placed in a single carton.



62) Family number: 19741969 (GB764807A)

Title:	IMPROVEMENTS IN OR RELATING TO MACHINES FOR FORMING, FILLING AND CLOSING **BAGS**

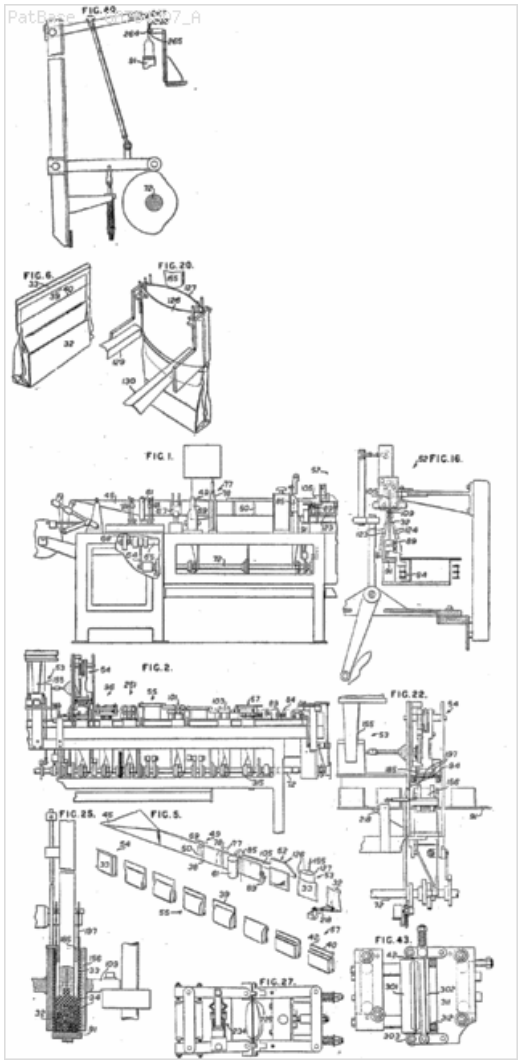
Family:

Publication number	Publication date	Application number	Application date
GB764807 A	19570102	GB19550004808	19550217

Probable Assignee:	BARTELT ENGINEERING CO
Assignee(s):(std)**:**	BARTELT ENGINEERING CO ; BARTELT ENGINEERING COMPANY
International class (IPC 8-9):	B65B9/08 B65B9/093 (Advanced/Invention); B65B9/06 (Core/Invention)
International class (IPC 1-7):	B65B9/08 B65D85/08
CPC:	B65B9/093
European class:	B65B9/08 B65B9/093
Classification Explorer	
Forward Citations:	US3481099, DE1186392, DE1114430,

Abstract:

Source: GB764807A 764,807. **Packaging** machines; making **bags**. BARTELT ENGINEERING CO. Feb. 17, 1955 [March 3, 1954; Nov. 1, 1954], No. 4808/55. Classes 94(1) and 94(2). A **packaging** machine includes means for filling, compacting the contents of, and stretching, flattening and closing the top portion of a **bag**. The machine described forms the **bags** by folding, pleating and heat **sealing** a web of thermoplastic coated material, Making **bags**. The web 45, coated side uppermost is folded to form the two **bag** sides 32, 33 and a bottom gusset by apparatus as described in Specification 702,723. At station 49 heated shoes 69, Figs. 1, 5, form transverse heat **seals** 50 and diagonal corner **seals** 38, while at station 77 the **seals** are engaged by water cooled shoes 78 to rapidly strengthen them. A knife 85 cuts individual **bags** from the web, the **bags** being engaged by grips 89 on an intermittently moving chain conveyer 84 for transit along a rail 91 through the machine. The web is advanced intermittently by rollers 61 operated by an indexing mechanism including a yieldable crank 64 driven from a main cam shaft 72 and rotating a shaft 65, Fig. 1, geared to the rollers. The indexing mechanism may include a photoelectric eye 67 detecting spaced marks on the web and operating to energize a brake 68 stopping the shaft 65. **Bag** filling and closing. The mouth of each **bag** consists of free flaps, Fig. 6, between which engages a bar 105 having downwardly directed air passages through which air is blown to partly **open** the **bag**. During such **opening** at station 52, bars 109, Fig. 16, move in to clamp the upper part of the **bag** against the bar 105 and plates 123, 124 are positioned to shape the expanding **bag**. At station 53, Figs. 2, 5, plates 126, 127, Fig. 20, initially flat, are introduced into the **bag** by the lowering of arms 129, 130. These arms then approach each other to bow the plates, **opening** out the **bag** and enabling a filling charge to be dropped into it by conventional filling means 155. In passage to the compacting station 54, an arm 218, Fig. 5, taps the **bag** base to settle the contents. At station 54, a plunger 94, Figs. 22, 25, enters the **bag** to compress the contents, fingers 197 swinging downwardly to spread the **bag** mouth and permit entry of a ring 185, slidable on the plunger, against which ring the mouth is clamped by plates 156 to prevent wrinkling. The plates 156 also support the **bag** sides. As the plunger is withdrawn, a brush, Fig. 24 (not shown), wipes surplus material from its base. At station 96, the side seams of the **bag** are gripped adjacent their upper ends by inwardly advancing jaws 225, Fig. 27, which are then moved by pneumatic means 234 to stretch the **bag** mouth. At station 251 opposed jaws and shaped plates, Fig. 31 (not shown), press the mouth and body of the **bag** to shape it preparatory to folding of the top at station 55. At station 55 plates 264, 265, Fig. 40, engage the **bag** mouth below the desired folding line 39 and a bar 268 moves horizontally to turn through 90 degrees the **bag** portion projecting above the plates. A bar 267 descends to fold the turned over portion down against the plate 264. At station 101 pressers, Fig. 41 (not shown), consolidate the fold and heated members lightly tack down the fold side seams. Identical mechanism (not shown) to that at station 55 forms a second fold along a line 40 at station 56 and further pressers (not shown) consolidate the fold at station 103. Finally ends 42 of the top fold are turned through 90 degrees by mechanism at station 57 comprising two rubber faced jaws 301, 302, Fig. 43, which clamp the **bag** mouth, one jaw 302 being slidable relative to its operating member 311. After the jaws have engaged the **bag**, the member 311 continues to advance against springs 312 so that rollers 303 fold the ends 42 against the sides of the jaw 301. The finished **packages** are removed from the conveyer by means 315, Fig. 2 (not described) for insertion into cartons.


FIG. 20.
FIG. 6.
FIG. 20.
FIG. 1.
FIG. 16.
FIG. 2.
FIG. 22.
FIG. 25.
FIG. 5.
FIG. 43.
FIG. 27.

63) Family number: 31377292 (US2805789A)

Title:	**CONTAINER** END STRUCTURE
Priority:	GB19550007819 19550317 US19530392692 19531117

Family:

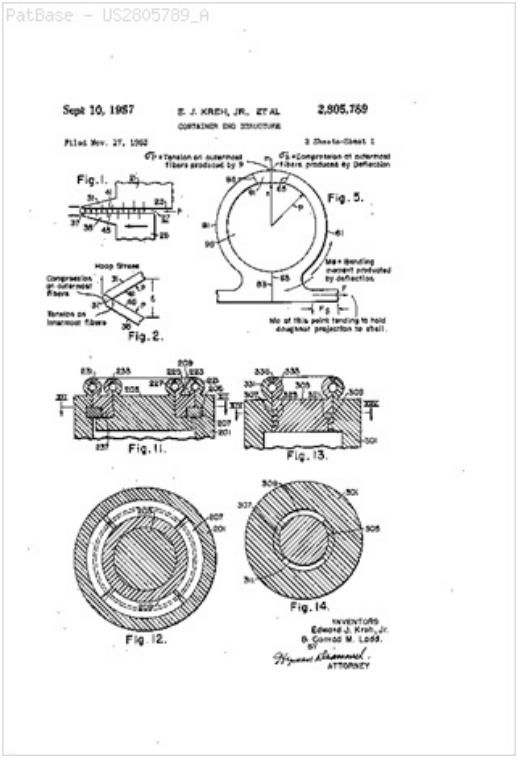
Publication number	Publication date	Application number	Application date
GB765040 A	19570102	GB19550007819	19550317
US2805789 A	19570910	US19530392692	19531117

Probable Assignee:	WESTINGHOUSE ELECTRIC CORP
Assignee(s):(std):	GEORGE RAYMOND SHEPHERD ; WESTINGHOUSE ELECTRIC CORP
Inventor(s):(std):	KREH JR EDWARD J ; LADD CONRAD M
Inventor(s):	JR EDWARD J KREH
International class (IPC 8-9):	B21K21/00 F16J13/00 F17C13/00 F17C13/06 (Advanced/Invention); B21K21/00 F16J13/00 F17C13/00 (Core/Invention)
International class (IPC 1-7):	F16J11/06 F16J13/00 F17C13/00 F17C13/06 F28F21/08
CPC:	F16J13/00 F17C13/002 F17C13/06
European class:	B21K21/00 F16J13/00 F17C13/00D F17C13/06
US class:	220/612 376/205

Classification Explorer

Cited documents:	US2711266 A, US2697770 A, US2640624 A, US2610820 A, US2473555 A, US2352038 A, US2320941 A, US2128093 A, US1958582 A, US1902494 A, IT281485 A, GB698426 A, GB547642 A, FR963387 A, DK52258 A, DE896585 A,
Forward Citations:	US6382456, US4170517, US3136447, US3127050, US3079033, EP0947745,

Abstract:
Source: GB765040A 765,040. **Closures** for resisting fluid pressures. SHEPHERD, G. R. (Westinghouse Electric International Co.). March 17, 1955, No. 7819/55. Class 123 (1). A high pressure **container**, for example of stainless steel, consists of a cylindrical shell 51 having a screwed **closure** 121, Fig. 1, the latter being formed with an annular, resilient, arc-section flange member 123 which is downwardly turned to bridge the joint between the **closure** and shell and which is welded around its lower edge to the shell, the weld 125 providing the pressure **seal**. In Fig. 2 the resilient member consists of a semicircular section ring 141 respective edges of which are welded at 143 to the **closure** 131 and at 145 to the shell 51. Owing to the resilience of the flange 123 and the ring 141 the small movement occurring between the shell and **closure** when the **container** is put under pressure is absorbed and is not communicated to the **sealing** weld.



64) Family number: 22661310 (US2781900A)

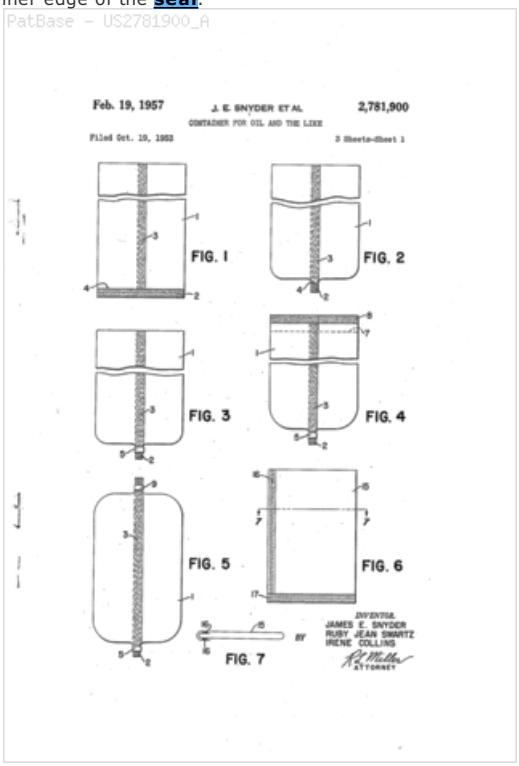
Title:	**CONTAINER** FOR OIL AND THE LIKE
Priority:	US19530386952 19531019

Family:

Publication number	Publication date	Application number	Application date
US2781900 A	19570219	US19530386952	19531019

Probable Assignee:	GOODYEAR TIRE AND RUBBER
Assignee(s):(std):	GOODYEAR TIRE AND RUBBER
Assignee(s):	GOODYEAR TIRE AND RUBBER CO ; THE GOODYEAR TIRE AND RUBBER COMPANY
Inventor(s):(std):	IRENE COLLINS ; JEAN SWARTZ RUBY ; SNYDER JAMES E
Inventor(s):	SWARTZ RUBY JEAN ; COLLINS IRENE
International class (IPC 8-9):	B65D33/16 (Advanced/Invention); B65D33/16 (Core/Invention)
International class (IPC 1-7):	B65D31/10 B65D75/48 B65D81/00
CPC:	B65D33/16
European class:	B65D33/16
US class:	206/525 383/107 383/108 383/109 383/113 383/93 53/417 53/455 53/479
Classification Explorer	
Cited documents:	US2635742 A, US2259866 A, US2071300 A, US1712454 A,
Forward Citations:	US4546882, US4436204, US4096946, US3344975, US3308936, US3265286, US3245200, US3111794, US2003186008, EP0003181, DE9207385,

Abstract:
Source: US2781900A (Claim 1) 1. The method of forming a **package** of fluent material v,,hich comprises **sealing** the opposed inner surfaces at one end of a tube of film material together in flat contact, gathering the **sealed** end together and then snugly encircling said gathered end with a band immediately inw-,irdlv of the **seal** whereby the band protects the **seal** against strains produced by pressure of the fluent contents of the **package** against the inner edge of the **seal**.



65) Family number: 21864823 (US2790577A)

Title:	CONTAINER TOP AND OPENER CONSTRUCTION
Priority:	US19530338008 19530220

Family:

Publication number	Publication date	Application number	Application date
US2790577 A	19570430	US19530338008	19530220

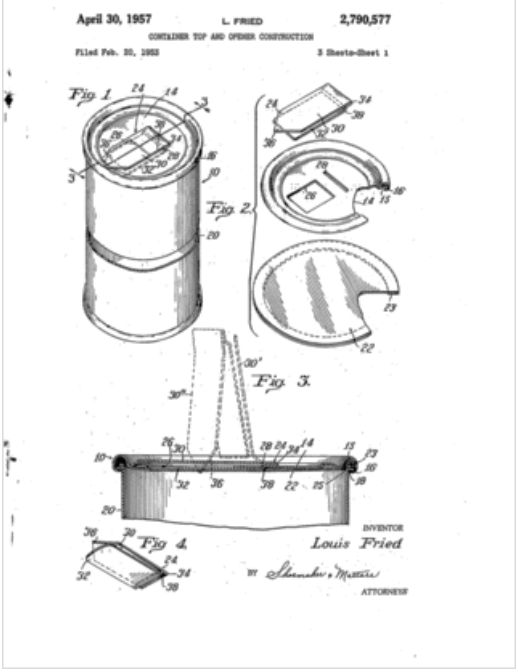
Probable Assignee:	LOUIS FRIED
Assignee(s):(std):	LOUIS FRIED
Inventor(s):(std):	LOUIS FRIED
Inventor(s):	FRIED LOUIS
International class (IPC 8-9):	B67B7/46 (Advanced/Invention); B67B7/00 (Core/Invention)
International class (IPC 1-7):	B65D17/16 B67B7/30
CPC:	B65D17/4012
European class:	B65D17/16B2
US class:	220/277
Classification Explorer	
Cited documents:	US2165720 A, US2165715 A, US2082760 A, US1344557 A, US1316508 A, US1265760 A, US1133999 A, US1040726 A,
Forward Citations:	US3220598, US3195764, US3195763, US3190485, US3160309, US3142411, US3130059, US3089610, US3071282, US3015410, US2989208, US2015053682,

Abstract:

Source: US2790577A What is claimed is: 1. A oontainer 'top construction comprising a plate member adapted to provide a closure for a container, said plate member having on opening therein through which the contents of the container can be dispensed, a ffrangible sealing member closing said opening, and an opener means carried by said plate member with portions thereof substantivally covering said opening in the plate member from both sides of saidss plate member and protecting the frangible sealing member fromnccidental fracture, said opener means including va pair of substantially dat end portions ioined together by an elongated substantially llat intermediate portion, all of said portions being folded in overlapping relationship, one end portion being disposed on the inner surface of said plate member and the other end portion and intermediate portion being idisposcd on the outer surface of said plate member, said opener means being manually bendable so that when it is desired to dispense the contents -of the can, the portions of the opener means are bent relative to one another and -the exterior end portion is directed into the opening of the plate member so as to fracture the sealing member. Z. A container top construction comprising a plate member having n dispensing opening therein and ta slot 'and being adapted to provide a closure for at container, a tirangible sealing member underlying said plate member so as to close said opening and slot, and nn opener e.1e~ mont comprising a folded body providing substantially flat end portions a-nd an intermediate portion joining said end portions so that the three portions overlie one another, one of said end portions covering said opening exteriorly of the container and being pointed and the other end portion covering said opening from the interior side and having o small opening in-to which the pointed end can be engaged to puncture the frangible sealing member to relieve pressure in the container prior to dispensing of the contents. 3. A container comprising a body having an open end, a container top for said open end including a metallic plate member having ia dispensing opening, ia frangible sealing member bonded at its peripheral portion to the peripheral portion of said plate menrber so ins to close off said dispensing opening, and an-opener means carried by said plate member having opposing portions thereof lying against the upper and lower sides of the plate member over and substantially covering said dispensing opening iirom both sides of said plate member and protecting the fnangible sealing member from accidental fracture, and said plate member and sealing member being bonded to the open end of said body. 4. A container comprising a body having ran open end, a container 'top for said open end including a metallic plate member having a dispensing opening, a frangible sealing member -bonded at its peripheral portion to the peripheral portion of said pl-ate member so -as to close off said dispensing opening, and an opener means oarried by said plate member having opposing portions thereof substandally covering said dispensing opening from both sides of said plate member and protecting the frangible sealing member from accidental fracture, -and said plate member and sealing member -being bonded no the open end of said body, said opener means including a pair of substantially Hat overlapping portions lying against the upper and lower sides of the plate member, one of which portions is pointed whereby upon removal of said opener means from said plate member =to expose the opening therein, the pointed portion be utilized for fracturing the frangible seal for, dispensing the contents. 5. A container _comprising ia, body havinggan open end, a container top for said open end including -a metallic plete member having a dispensing opening, a fnangible V 2,'7a6,`c'r'? sealing member bonded at its peripheral portion to the peripheral portion of said plate member so as to close off said dispensing opening, and an opener means ca:- ried by said plate member with portions thereof substantially covering said dispensing opening from both sides of said plate member and protecting the frangible sealing member from accidental fracture, and said plate member and sealing member being bonded to the open end of said body, said opener means including a pair of sub» stafntially Hat end portions joined together by 'an elongated substantially Hat intermediate portion, all of said portions being folded in overlapping relationship, one end portion being said plate member termediate portion face of said plate manually bendable disposed on the inner smface of and -the other end portion cmd inbeing disposed on the outer summernber, said opener means being so that when it is desired to dis» pense the contents of the can, the ponions nf the opener means are bent relative to one another and 'the exterior end portion is 'directed into the opening of the plate member so as to fracture the sealing member. 6. A containeer -top construction comprising a plate member adapted to provide a closure for 2. container, said plate member having an opening therein from which the contents of the container can be dispensed, a frangihle sealing member closing said opening, 'and an opener means carried by said plate member with portions thereof substantially covering said opening in the plate mem~ ber from both sides of said plate member and protecting the frangible sealing member from ac/cidenial fracture, said opener means including a pair of substantially Hat portions, one of which Hat 'portions is disposed exteriorly of the dispensing opening and has a substantially Vshaped slit therein defining a pointed tab with a, hinge axis transversely of the flat portion at the ends of said slit whereby bending of said one Hat portion about its hinge axis provides an exposed pointed tab adapted to be moved into puncturing engagement with the frangible sealing member. 7. A container top construction comprising a plate member adapted to provide a closure for a container, said plate member having an opening therein from which the contents of the container can be dispensed, a frangible sealing member closing said opening, and an opener means, said opener means including a pair of substantially Bat portions joined by a fold, one of which portions overlies fue dispensing opening while the other Hat portion underlies the opening, said one portion having a V-shaped slit -therein with axially aligned slits extending from -the ends of said V~shaped slit trvansversely of the one flat pcvrtion so as 'to provide a partially separated pointed tab adjacent n hinge axis through the slit extensions, said one portion being movable about the fold felative to the other Hat portion and dispensing opening and bendable about its hinge axis no depend the pointed lab into position for punctulring the frarkgible sealing member. 8. A `container top construction according to claim 7 wherein said other Hat portion substantially entirely underlies the dispensing opening and has a slit therein into which the pointed tab is adapted to be moved. 9. A container top construction according to claim S wherein said last mentioned slit and said -hinge axis are approximately equally spaced from said fold. 10. A container wp construction comprising a plale member having m dispensing opening therein and in slot and 'being adapted to provide a closure for a Qqntiiner, a frangible sealing member underlying said plate mem~ ber so as to close said opening and slot, and an opener element including a pair of substantially Eat portions joined by a fold, one of which Hat portions overlies the dispensing opening while the other flat portion underlies the openimghums Qi said portions having a 'fl-shaped slit therein with axially aligned slits extending from the ends of said V-shaped slit transversely of the one flak portion so as to provide a partially separated pointed fab adjacent a hinge axis through the slit extensions, the other flat portion having ian olfset therein space/d from said fold and positioned insaid slot of the

plate member so tha-t part of said other portion between the fold and offset :overlies and abuts the plate member, said one portion being movable about the fold relative to the other Hat portion and dispensing opening and bendable about its -hinge axis to depend the point/ed tab into position for punctuvring the frangible sealing member. ll, An opener for removing :L frangible receptacle closure, said opener eompfising a single snrip of Hat metal folded transversely upon itself to form two super posed portions, one of said portions having the Free end pointed, the other pofrtion having an oRset adjacent to the fold line whereby the major extent of said other portion is spaced from the said one portion. 12. An opener aoéording to claim ll, wherein the said other .portion has an opening adapted to receive said pointed end. 13. An opener for removing ia frangible receptacle closiure, said opener comprising a length of flat strip metal fnlded transversely upon iwelf to form two superposed portions, one of said portions having an offset adjacent to the fold line whereby the major extent of said one portion is spaced from the other portion, said one portion ,having an opening therein, and a pointed spur carried by said other portion and adapted to be positioned for extension through said opening upon n predetermined manipulation of said other portion, 14. An opener for removing a franglble receptacle closure, said opener comprising a. length of Hat strip material folded 'transversely up-on itself in two places to provide mwo and portions and an intermediate portion, said portions being arranged in superposed relation, one of said end portions being oifset adjacent mo the end thereof which is joined to fhe intermsdiale portion whereby the major extent of the said one end portion is spaced from the intermediate portion, the other one of the end portions being disposed in the space between said one end portion and the intermediate portion, the said one end portion having an opening therein, and the said other one of the end portions having a pointed end adapted for extension through said opening upon a -predetermined rearrangement of the iportions. 15. A container top construction comprising a. plate member adapted to provide zz closure for zu couuaiuer, said plate member having an opening therein through which the contents of the container can be dispensed, a Erzmqgible sealing member closing said opening and a -removable opener means carried by said member having spaced upper and lower portions ooveling and closing said opening in the plate member upon the mp and bottom sides of the latter, said lower portion covering the full width and length of said opening between the sealing member and the plate member. 16. A container top construction compaising ia plate member fadapted to provide a. closure for a container, said plate member having an opening therein through which the contents of the container can be dispensed, a fnangible sealing mem-ber closing said opening and a rcmnvable opener means carried by said plate member and embodying upper and lower portions of ia. size larger than said opening and lymg one upon the top of the plate member and the other upon the under side thereof with the opening therebetween and covered by the same, the lower portion protecting the frangible sealing mem- -ber from accidental Lracmre, one of said portions being qgointed w-hereby upon removal of said opener means from said plafte member to expose the opening therein the pointed portion may be utilized for fracturing the frangible seal for dispensing the contents. 17. A container top construction comprising a plate member adapt/ed to provide a closure for a container; said plate member having therein un opening of predetermined width and length through which the contents of the container can be dispensed, a frangible sealing member closing said opening and an opener means carried by said plate member and embodying a length of dat material having a widdn greater than the width of said opening and folded sstransversely upon itself to form a pair of substantially flat superposed portions having the plate member therebetween and covering said opening upon the top and under sides of the plate member, the under one of the portions protecting the frangible sealing meniber irom accidental iiracture, one of said portions having a pointed end, and said plate member having sa slot extending ocross and spaced from an end of the opening and one fold portion of said opener being disposed in said slot. 18. An opener for removing a frangible receptacle closure, said opener comprising at single strip of Hat metal folded transversely upon itself to form two superposed portions, one portion having ian oiiset adjacent to tho fold 'line whereby the major extent of one portion is spaced from the other portion, and s. pointed means carried by said other portion for use in breaking the frangible seal. 19. A container top construction comprising a plate member hainng a dispensing opening therein and a slot and being adapted to provide a closure for a container, n frangible sealing member underlying said plate member so as to close said opening and slot, and an opener element comprising a strip of iiat material folded upon itself to provide an under portion and an upper portion, said under portion extending through said slot to the under side of the plate member and covering said dispensing opening, said upper portion being positioned over the top of the plate member and covering said dispensing opening, and pointed means carried by said upper portion for puncturing the sealing member. 20. A container top construction according to claim 19, Wherein said portions of the opener element are of n width materially greater than the dispensing opening and extend beyond the opposite sides thereof when in covering relation therewith. 21. A container top construction comprising a plate member having a dispensing opening therein and a slot disposed across and spaced from one end of said opening, the plate member being adapted to provide a closure for a container, a frangible sealing member underlying said plate member so as to close said opening and slot, and an opener element comprising a. strip of dat material folded transversely upon itself to provide an under portion and an upper portion, said under portion extending through said slot to the under side of the plate and covering said dispensing opening, said upper portion being positioned over the top of the plate member and covering said dispensing opening, the under portion being odset adjacent to the fold line whereby the major extent of said under portion is spaced trom the upper portion to receive the thickness of the top between the portions, the under portion lying between the dispendng opening and the frangible sealing member to protect the latter against accideutal rupture, and pointed means carried by said upper portion for puncturing the sealing member. 22. A container having a Wall with an opening therein through which the contents of the container can be dispensed, a irangible sealing member fully covering and closing said opening on the inner side of the Wall, and an opener means carried by said wall having spaced portions extending over said opening upon the inner and outer sides of the wall. 23. A container having a wail with an opening therein through which the contents of the container can be dispensed, a frangible sealing member upon the inner side of the wall fully covering and closing said opening, and an opener means carried by the wall and held thereon for complete removal thereirorn and having an inner portion lying over the inner side of the wall and extending fully across the opening in one dimension thereof and an outer portion located upon the outer side of the wall and adapted to be grasped to facilitate the complete removal of the opener means from the wall.

PatBase - US2790577_A



66) Family number: 21898530 (US2891453A)

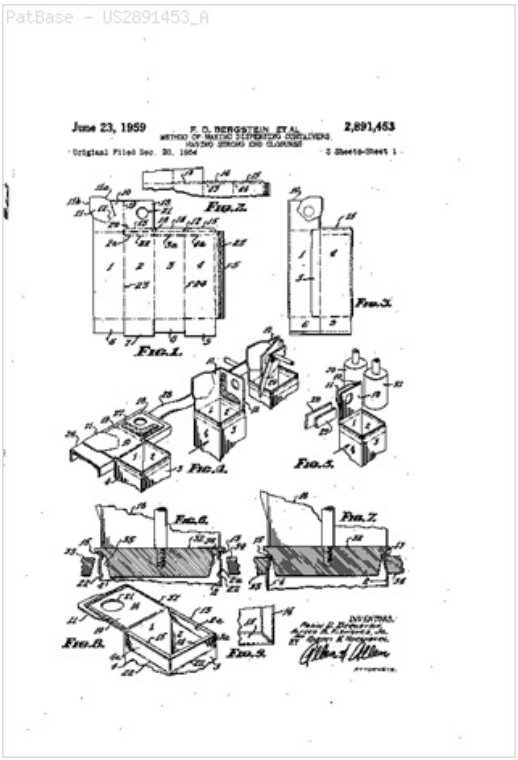
Title:	METHOD OF MAKING **DISPENSING** **CONTAINERS** HAVING STRONG END **CLOSURES**
Priority:	US19540476484 19541220 US19560604804 19560817

Family:

Publication number	Publication date	Application number	Application date
US2791364 A	19570507	US19540476484	19541220
US2891453 A	19590623	US19560604804	19560817

Probable Assignee:	BERGSTEIN PACKAGING TRUST
Assignee(s):(std):	BERGSTEIN PACKAGING TRUST
Inventor(s):(std):	NERENBERG ROBERT W ; KLEINGERS JR ALFRED B ; BERGSTEIN FRANK D
Inventor(s):	JR ALFRED B KLEINGERS
International class (IPC 8-9):	B31B5/00 B65D5/72 (Advanced/Invention); B31B5/00 B65D5/72 (Core/Invention)
International class (IPC 1-7):	B65D5/26 B65D5/70
CPC:	B65D5/727 B31B2100/00 B31B2120/30
European class:	B65D5/72F L31B203/00A
US class:	229/125.09 229/131.1 229/160 493/121 493/128 493/183 493/87 53/456 53/491
Classification Explorer	
Cited documents:	US751714 A, US2671596 A, US2663981 A, US2596225 A, US2593019 A, US2581237 A, US2555526 A, US2549048 A, US2409460 A, US2276332 A, US2272203 A, US1954428 A,
Forward Citations:	US5201698, US5097958, US4569474, US4311476, US4292787, US3118351, US3039669, US3029009, DE2900625,

Abstract:
Source: US2891453A (Claim 1) 1. A method of acting upon **containers** which comprises providing a knockeddown **container** having a tubiflar body and end **closure** means, the **closure** means at one end of the **container** comprising a plurality of flaps adapted to be folded in superposed relation, and at the other end comprising a plurality of narrow flanges adapted to be folded outwardly relative to the body walls of the **container**, erecting said **container** and positioning it over a mandrel with said first named end aligned with an end of the mandrel, **sealing** the **closure** flaps at said first named end over the said end of the mandrel, and while said **container** is supported on said mandrel, acting upon the opposite end of the carton to crimp inwardly the porttions of the carton body walls adjacent the said narrow flanges, including the step of folding said narrow Ranges outwardly at substantially ri,-ht angles to the planes of said body walls.



67) Family number: 20416912 (GB780753A)

Title:	Machine for evacuating and **sealing** **containers**
Priority:	19531116

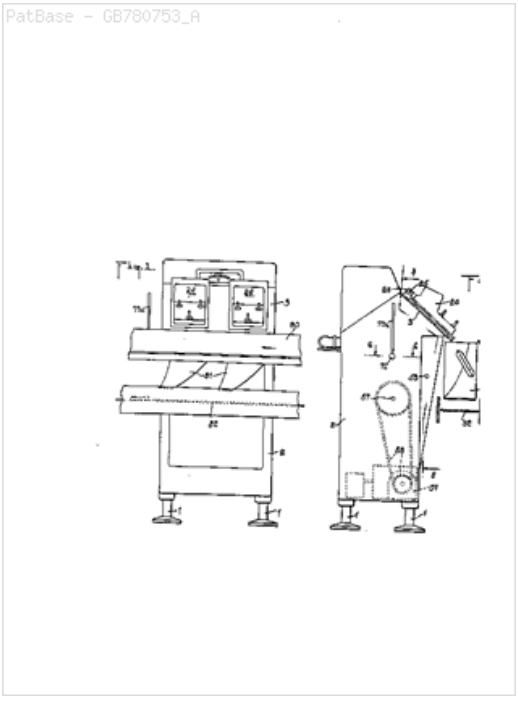
Family:

Publication number	Publication date	Application number	Application date
GB780753 A	19570807	GB19540031678	19541102

Probable Assignee:	STANDARD PACKAGING CORP
Assignee(s):(std):	STANDARD PACKAGING CORP
International class (IPC 8-9):	B65B31/02 (Advanced/Invention); B65B31/02 (Core/Invention)
International class (IPC 1-7):	B65B31/02
CPC:	B65B31/02
European class:	B65B31/02

Classification Explorer

Abstract:
Source: GB780753A 780,753. Seaming. STANDARD **PACKAGING** CORPORATION. Nov. 2, 1954 [Nov. 16, 1953; Nov. 30, 1953], No. 31678/54. Class 42 (1). [Also in Group XVII] A machine for evacuating and heat **sealing** **bags** 5 or other **containers** has a heat **sealing** bar 20 and an anvil 7 between which the mouth of the **container** is pressed and a hollow head 24 for evacuating the **containers** having an **open** side facing a supporting surface 6 for the **containers** 5 which slopes away from the anvil 7. A **bag** 5 is laid on the support 6 so that its mouth overlies the heat **sealing** anvil 7 and a pressure pad anvil 8, on a platform 4 set at an angle to the support 6. A reciprocating tube 11 moves in a bearing 10 and carries a bracket 12 having an assembly 13 mounted on a cross-head 19 which also supports the hollow **sealing** bar 20 fed with heated oil through conduits 31. Arms 14 carrying pressure fingers 15 are urged downwards by springs 16 and move in guideways extending at an angle to the vertical such that the arms move apart as the tube 11 and the bracket 12 descend thus smoothing out the **bag** mouth before it is **sealed**. The tube 11 carries conduits 31 through which passes the heated liquid, which conduits pass through a **seal** 32 above which ports 33 **open** into a manifold 34 connected to the main vacuum conduit 35 through a valve 37. Suction is applied through holes 9 in the **sealing** anvil 7 connected through a conduit 44 and a valve 47 to a holding vacuum conduit 45, which suction holds the **bag** mouth on the anvil prior to **sealing**. A valve 41 provides a vent to the atmosphere for the manifold 34 and for the holes 9 by means of a channel 70 in the shaft 43 of the valve which, as the valve 41 **opens**, connects the conduit 44 with the atmosphere. The valves 37, 47, 41, Fig. 10, have shafts 39, 49, 43 respectively connected to rocking arms, e.g. 52, Fig. 9, operated by corresponding cams. The main cam 60 has a groove 61 in which rides a follower 62 pivoted to a lever 63 which has a projection 64 with a roller 65 and a spring 68 the other end of which is secured to the lower part of the tube 11. The head 24 is **opened** by the movement of the main cam 60 which moves the roller 65 against a part 66 of the tube 11 at the upper end of which a roller 29 abuts a projection on the inside of the head which pivots at 25. A **bag** 5 is placed by hand on the platform 6, its mouth spread over the anvil 7. Suction is applied through the holes 9 to hold the **bag** in place. The vent valve 41 closes and the head 24 is lowered. The pressure fingers 15 hold the **bag** in place and remain in this position exerting a light pressure while the valve 47 is closed cutting off the holding vacuum and the main vacuum valve 37 is **opened**. After a period, when the **bag** has been exhausted, the valve 37 is closed and the tube 11 is further lowered. The pressure fingers 15 move apart, smoothing the **bag**, and the heat **sealing** bar 20 then presses upon the **bag** mouth to effect the **sealing**. The vent valve 41 is **opened** and the pressure inside the head becomes atmospheric. The head is raised and the **bag** falls into a shoot which deposits it on a conveyer belt. The machine is preferably of the duplex type, as is seen in Fig. 10, and has two heads. Starting and stopping is done by hand through a lever on a shaft 72. A safety device is incorporated to prevent injury to an operator by descent of the heat **sealing** bar. The vacuum holes 9 may impress an inscription on the **bag**.



68) Family number: 20516580 (US2814358A)

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Title: AUTOMATIC VACUUM CLEANERS

Priority: US19550531780 19550831

Family:

Publication number	Publication date	Application number	Application date
CH338568 A	19590531		19560801
DE1188777 B	19650311	DE1956E012419	19560523
FR1148200 A	19571204		19560426
GB784606 A	19571009	GB19560011131	19560412
US2814358 A	19571126	US19550531780	19550831

Probable Assignee: ELECTROLUX AB

Assignee(s):(std)**:** ELECTROLUX AB ; ELECTROLUX CORP

Inventor(s):(std)**:** CAWL ALLEN PRETLOW ; CAWL ALLEN P ; BEEDE ARNOLD HENRY ; BEEDE ARNOLD H ; ARNOLD HENRY BEEDE ; ALLEN PRETLOW CAWL

Inventor(s): PRETLOW CAWL ALLEN ; HENRY BEEDE ARNOLD

International class (IPC 8-9): A47L5/36 A47L9/14 A47L9/19 A47L9/28 A47L9/32 (Advanced/Invention); A47L5/22 A47L9/10 A47L9/14 A47L9/28 A47L9/32 (Core/Invention)

International class (IPC 1-7): A47L9/10

CPC: A47L5/362 A47L9/1427 A47L9/19 A47L9/2842 A47L9/2857 A47L9/2868 A47L9/2889 A47L9/327

European class: A47L5/36A A47L9/14 A47L9/14D A47L9/19 A47L9/28 A47L9/28D2 A47L9/28F A47L9/28P A47L9/28S A47L9/32D

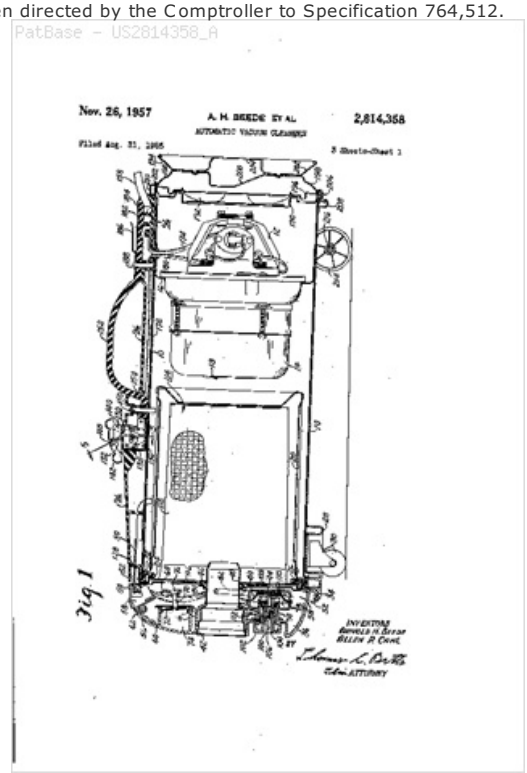
US class: 15/327.7 55/356 55/373 96/403

Classification Explorer

Cited documents: US2714425 A, DE947513 A,

Forward Citations: WO07131983, US7146680, US5062870, US3273194, US3137883, US3092868, US3083396, US3039129, US3016982, US3006020, US2997728, US2974343, US2961688, US2921153, US2004045121, DE1144888,

Abstract:
Source: GB784606A 784,606. Vacuum cleaners. ELECTROLUX CORPORATION. April 12, 1956 [Aug. 31, 1955], No. 11131/55. Classes 8(1) and 8(2). Automatic release of a latch 58, Fig. 1, holding a pivoted **cover** 36 having a central dust-laden air inlet 40 against the **open** end 26 of the cylindrical casing 10 of a motor-fan suction cleaner of the inside **bag** type is effected by displacement of a diaphragm 72 and a pin 70 carried by the **cover** 36 by vacuum on the fan side of the filter **bag** 118 being transmitted through tubes 84, 112 and past a valve 104 when the latter is unseated by a flexible diaphragm 80 having one side connected by a tube 82 to the dust-laden air inlet 40 and the other side connected by the tube 84 to the fan side of the dust **bag**; the valve 104 and diaphragm 80 also being carried by the **cover** 36. The valve 104 is held closed by a spring 106 the tension of which is adjustable by a knob 102, and release of the **cover** 36 affords release of a slide 145, Fig. 6, which **opens** the motor switch 130. A handle 152 has a finger 106 on which may be mounted cleaning tools and the rear end **cover** of the casing 10 provides a cord reel 194. The dust **bag** which may be of paper or cloth is surrounded by a perforated metal casing 20 and a final disc filter 192 is located adjacent the rear end **cover**. Reference has been directed by the Comptroller to Specification 764,512.



69) Family number: 22316586 (US2823795A)

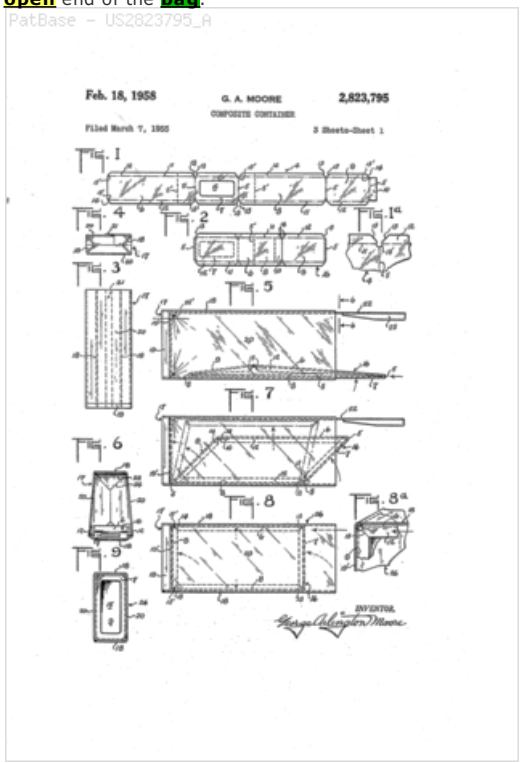
Title:	COMPOSITE **CONTAINER**
Priority:	US19550492584 19550307

Family:

Publication number	Publication date	Application number	Application date
US2823795 A	19580218	US19550492584	19550307

Probable Assignee:	ARLINGTON MOORE GEORGE
Assignee(s):(std):	ARLINGTON MOORE GEORGE
Inventor(s):(std):	ARLINGTON MOORE GEORGE
Inventor(s):	MOORE GEORGE ARLINGTON
International class (IPC 8-9):	B65D33/02 (Advanced/Invention); B65D33/02 (Core/Invention)
International class (IPC 1-7):	B65D5/60
CPC:	B65D33/02
European class:	B65D33/02
US class:	383/106 383/118 383/119
Classification Explorer	
Cited documents:	US2717073 A, US2678768 A, US2548985 A, US2483174 A, US2331966 A, US2317223 A, US2269796 A, US2194669 A, US2124699 A, US2119093 A, US2102508 A, US2074357 A, US1992087 A, US1340558 A, GB190002140 A,
Forward Citations:	US9850036, US9745104, US9708104, US9688442, US9663282, US9656783, US9630761, US9625014, US9221590, US9205967, US9187228, US9150342, US8951591, US7725361, US3159274, US2925949, US2014307985, US2014287855, US2013011527, US2010230411, US2008190023, US2007023435, FR2982598,

Abstract:
Source: US2823795A 1. A rectangular reinforced transparent **bag** **container** comprisina reinforcing articulated frame of substani' tially ri,- d sheet material consistin.- of two side wall panels and two end wall panels being hingedly connected in eiad to end succession so that said frame may be adji,isted from a collapsed oblique parallelogram condition to Pn expanded rectangular condition, an outer **bag** col-nposed of flexibly stretchable transparent heat-**sealable** material and having heatsealed seamed side walls and a seariied closed end wall including an opposite closable end wall, said frame being insertable into said **bag** in partial'y collapsed condition and expandable to stretch the side and closed end wall of the **bag** tautly against the correspondin.- wall panels of the expanded frame, ,ind narrow flinges hinged to the opposite free edges of each of said frame panels and Dressed by said taut **bag** walls into disposition substantially at right angles to the panels to which they are hinged, thereby rigidifying said frame to prevent inward buckling of the frame panels, the ba.- walls tautly spread over said flanges defining op- posite **open** sides of frame panels constituting two transparent window panels provided for the visible display of tho particular product intended for said **bag** **container**, one of said end wall panels traversing the **open** end of the **bag** and being substantially cut away inwardly of the side edges thereof to provide an **opening** for inserting said particular product into said **bag** **container**, said last named panel being spaced inwardly of the free end edges of the **open** end of the **bag**.



70) Family number: 19663383 (GB792086A)

Title:	Improvements in or relating to the hermetic **sealing** of thin-metal **containers**
Priority:	GB19550032333 19551111

Family:

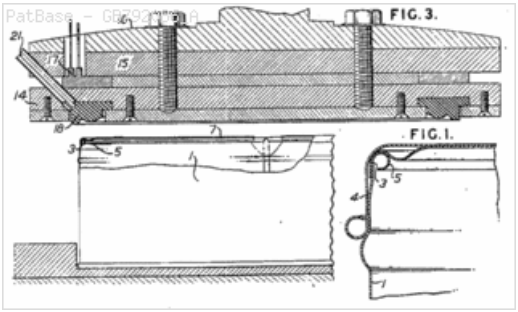
Publication number	Publication date	Application number	Application date
GB792086 A	19580319	GB19550032333	19551111

Probable Assignee:	METAL BOX CO LTD
Assignee(s):(std)**:**	METAL BOX CO LTD
Assignee(s):	THE METAL BOX COMPANY LIMITED
Inventor(s):(std)**:**	MARKES DOUGLAS HENRY ; RICHARD MALCOLM JAMES
International class (IPC 8-9):	B65B7/28 B65D43/02 B65D51/20 (Advanced/Invention); B65B7/28 B65D43/02 B65D51/18 (Core/Invention)
International class (IPC 1-7):	B65B7/28
CPC:	B65B7/2878 B65D43/0222 B65D51/20 B65D2251/0018 B65D2251/0093 B65D2543/00092 B65D2543/00277 B65D2543/00527 B65D2543/00537
European class:	B65B7/28F4 B65D43/02S5E B65D51/20 L65D251/00Y2F L65D251/00Y6M L65D543/00Y1F2C L65D543/00Y1M4 L65D543/00Y8D1N L65D543/00Y8D3

Classification Explorer

Forward Citations: WO9839218, WO9839218, US6286705, US6070507, US5983607, US4742930, GB2195989, GB2195989,

Abstract:
Source: GB792086A 792,086. Closing **containers**. METAL **BOX** CO., Ltd. Sept. 14, 1956 [Nov. 11, 1955], No. 32333/55. Classes 94(1), 125(2) and 125(3). A metal **container** 1, formed with a neck 3 and an inwardlyextending rim 5, is closed and **sealed** by a soft-metal foil diaphragm 7 which is stretched across its mouth and secured by a thermoplastic adhesive to the rim and the exterior of the neck. The adhesive may be applied to the rim and neck or to the underside of the diaphragm. If the **container** is circular, as shown, the rim is formed by an inturned curl, but if the **container** is rectangular in cross-section, see Fig. 2 (not shown), the rim is formed by a horizontal flange. The **closure** may be completed by a lid 4 in frictional engagement with the neck, and a cardboard disc, see Fig. 4 (not shown), may be located between the undersurface of the lid and the diaphragm. A device for applying and **sealing** the diaphragm comprises a vertically-reciprocable tool 10, Fig. 3, carrying a resilient ring 18, e.g. of silicone rubber, which is adapted to mould the diaphragm to contour of the rim and neck and to be heated to activate the adhesive. The ring 18 is clamped to the undersurface of a steel plate 14 which is separated from the body of the tool by an insulating plate 15 and heated by a thermostatically-controlled, ring-type element 17. The temperature of the ring 18 is indicated by a thermometer 21.



71) Family number: 19854876 (GB797789A)

Title:	ARRANGEMENT FOR PRODUCING **PACKAGING** **BAGS**
Priority:	GB19560026533 19560830

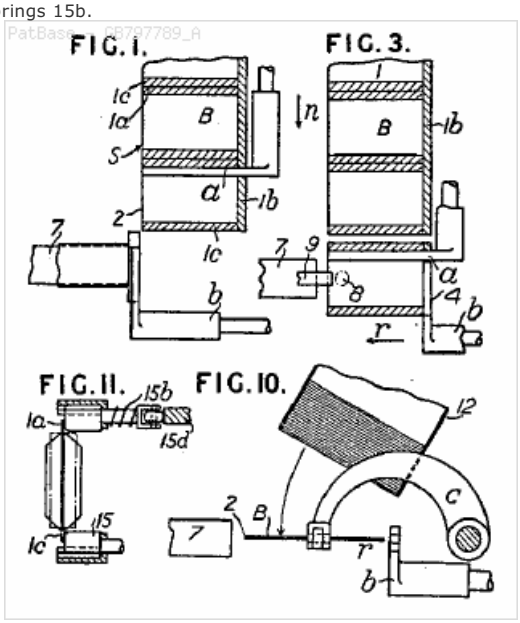
Family:

Publication number	Publication date	Application number	Application date
GB797789 A	19580709	GB19560026533	19560830

Probable Assignee:	HESSER MASCHF AG
Assignee(s):(std):	HESSER AG MASCHF ; HESSER MASCHF AG
Assignee(s):	FR HESSER MASCHF AG ; FR HESSER MASCHINENFABRIK AKTIENGESELLSCHAFT
International class (IPC 8-9):	B31B3/00 (Advanced/Invention); B31B3/00 (Core/Invention)
International class (IPC 1-7):	B31B37/26
CPC:	B31B70/28 B31B70/00 B31B2160/10
European class:	B31B1/00 B31B49/00 L31B219/26A

Classification Explorer

Abstract:
Source: GB797789A 797,789. Making paper and like **bags**. HESSER MASCHINENFABRIKEN -AKT.- GES. Aug. 30, 1956 [Sept. 10, 1955], No. 26533/56. Class 94(2). In a machine for the production of rectangular **bags**, e.g., lining **bags**, from a flat web of heat **sealable** material the **bags** B are conducted by means of jaws a in a direction substantially perpendicular to the longitudinal axis of the folding mandrel 7 so that the **open** end of a **bag** is brought in front of the end face of the mandrel and transferred to a gripper 9 on the mandrel which draws the **bag** on to the mandrel. In the embodiment shown, two strips S of heat **sealable** material are joined together at the longitudinal edge 4 facing away from the folding mandrel 7 by heat **sealing**. The width of the web is approximately that of height of the ultimate flat **bag** B increased by the width of the bottom seam 1b. A series of adjoining transverse **sealing** strips or seams 1a and 1c are formed on the web by heat **sealing** so that the web is then composed of a continuous plurality of **bags** B which are **open** at one side. The web 1 is forwarded in a direction perpendicular to the longitudinal axis of the mandrel 7 so that the edge 2 of the tube facing the folding mandrel is spaced from the end face of the mandrel 7 by an amount equal to the width of the seam 1b which will ultimately form the bottom seam of the **bag**. The leading **bag** B is held below the **sealing** seam 1a by means of a pair of jaws a which move rectilinearly at right angles to the longitudinal axis of the folding mandrel so that this **bag** can be severed and then advanced in the direction of arrow n to mandrel 7. Now the jaws b engage the **bag** B at the bottom seam 1b and move towards mandrel 7 which has moved into its transfer position, after the jaws a have **opened** and released the **bag** B and are returning to engage the next leading **bag**. After lateral suction devices 8 have **opened** the unsealed mouth of the **bag** B in front of the end face of the mandrel and grippers 9 on the mandrel 7 have engaged the margins of the **bag** on either side at the edge 2, these grippers 9, together with the jaws b move in the direction of arrow r thereby drawing the **bag** onto the mandrel. In a modification, Figs. 5 to 8 (not shown) the tube 1 is formed from a single strip of material which is folded over in half along the middle line of its width and the halves brought together to form a strip of double thickness so that bottom **closure** is formed without heat **sealing**. In a further modification, Fig. 10, individual flat **bags** B are withdrawn from a magazine 12 and presented to the mandrel 7 by an oscillating gripper arm C. The side seams 1a, 1c are bent over by slides 15, Fig. 11, on the jaws b operated by cams 15d against springs 15b.



72) Family number: 19966515 (GB800027A)

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Title: Device for treating a photographic print with liquid

Priority: 19551227 DE1956I012515 19561128

Family:

Publication number	Publication date	Application number	Application date
BE553716 A	00000000		00000000
CH337407 A	19590331		19561227
DE1099351 B	19610209	DE1956I012515	19561128
GB800027 A	19580820	GB19560033286	19561031

Probable Assignee: POLAROID CORP

Assignee(s):(std)**:** POLAROID CORP

Assignee(s): INT POLAROID CORP

Inventor(s):(std)**:** EDWIN HERBERT LAND ; ELORANTA VAITO KALERVO ; LAND EDWIN HERBERT ; VAITO KALERVO ELORANTA

Inventor(s): HERBERT LAND EDWIN ; KALERVO ELORANTA VAITO

International class (IPC 8-9): G03D13/04 G03D9/00 (Advanced/Invention); G03D13/02 G03D9/00 (Core/Invention)

International class (IPC 1-7): G03D13/04

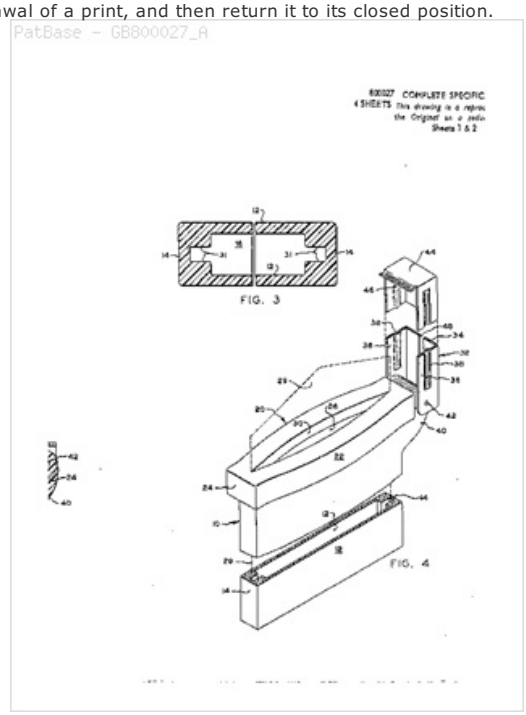
CPC: G03D9/00 G03D13/04

European class: G03D13/04 G03D9/00

Classification Explorer

Cited documents: DE351764 A, DE192922 A,

Abstract:
Source: GB800027A 800,027. Photographic processing devices. INTERNATIONAL POLAROID CORPORATION. Oct. 31, 1956 [Dec. 27, 1955], No. 33286/56. Class 98(2) A portable device suitable for use in the process of Specification 800,028, in which a silver transfer-reversal print is given a second or so of washing in aqueous lower alcohol to remove processing reagents which might discolour the print but to prevent dissolution of a newly formed film carrying the image, comprises rectangular **container** 10 for the washing liquid provided with elastic **closure** element 20 having longitudinal slit 30 normally closed but **openable** by pressure on the end walls 14 for introduction of a print 29. To ensure retention of slit 30 in the closed position, for instance when the device is carried in the user's pocket, retaining element 32 pivoted at 42 is arranged to clamp over **closure** element 20. Figs. 1-3 (not shown) are concerned with the manner of fitting of the **closure** element 20 on to the **container** 10, flanges to squeegee the print during its withdrawal and guide channels to hold the print centrally in the **container**. Of seven other Figs. (also not shown), Figs. 5, 6 are directed to a device very similar to that of Figs. 1-4; Fig. 7 to a device in which the entrance slit for the print may normally assume the **open** position but be held closed by a retaining element; Fig. 8 to a device with a rectangular upper section for the print and an enlarged lower section for washing liquid, usable by inversion of the device so that the liquid may fill the upper section, or by shaking the device; and Figs. 9-11 to mechanisms operable as on the end walls 14 of Fig. 4 to **open** the slit 30 for insertion of a print, slightly **open** it for squeegeeing during withdrawal of a print, and then return it to its closed position.



73) Family number: 22296257 (US2858655A)

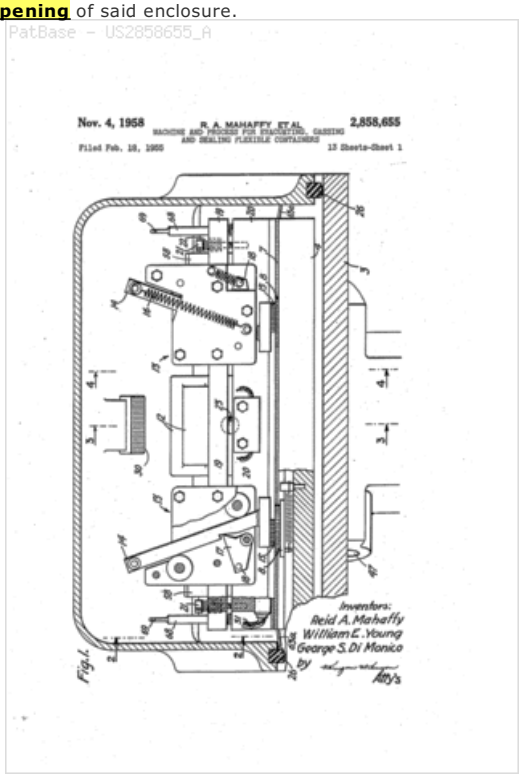
Title:	MACHINE AND PROCESS FOR EVACUATING, GASSING, AND **SEALING** FLEXIBLE **CONTAINERS**
Priority:	US19550489216 19550218

Family:

Publication number	Publication date	Application number	Application date
US2858655 A	19581104	US19550489216	19550218

Probable Assignee:	STANDARD PACKAGING CORP
Assignee(s):(std):	STANDARD PACKAGING CORP
Inventor(s):(std):	DI MONICO GEORGE S ; MAHAFFY REID A ; YOUNG WILLIAM E
Inventor(s):	MONICO GEORGE S DI
International class (IPC 8-9):	B65B31/02 (Advanced/Invention); B65B31/02 (Core/Invention)
International class (IPC 1-7):	B65B31/02 B65D33/00
CPC:	B65B31/024
European class:	B65B31/02E
US class:	141/10 141/66 141/8 53/385.1 53/86
Classification Explorer	
Cited documents:	US2633955 A, US2630955 A, US2606704 A, US2145941 A,
Forward Citations:	US8099930, US3516223, US3059389, US2991609, US2984055, US2009217625, EP3115304, DE1256577, DE102008011019,

Abstract:
Source: US2858655A (Claim 1) 1. A machine for evacuating, gassing and **sealing** a **bag** having superirnposcd flexible walls with interspacerl areas containing the atmosphere and having a mouth with the portions of said walls adjacent to said mouth tending to Batten together and said portions being hermetically sealahle and said **bag** being gas-tight when said portions are **sealed**, said machine including au enclosure for said **bag** and which **opens** and closes to permit said **bag** to be inserted and removed from said enclosure, means Within said enclosure for supporting said **bag** with the said wall portions substantially Hat and at least one of said portions free to **open** from the other of said portions completely in a longitudinal direction for at least a part of its transverse extent, means for sucking the atmosphere from said enclosure to cause the atmosphere in saidrbag to blow therefrom and force said free wall portion to **open** while evacuating said enclosure and said **bag** to a pressure substantially less than atmospheric pressure, means for introducing a gas at a relatively higher pressure than said evacuated pressure into said enclosure while restraining said **open** **bag** wall portion from closing until said gas is sucked into said **bag** and said enclosure, and means within said enclosure for **sealing** said **bag** wall portions prior to **opening** of said enclosure.



74) Family number: 22608965 (US2863267A)

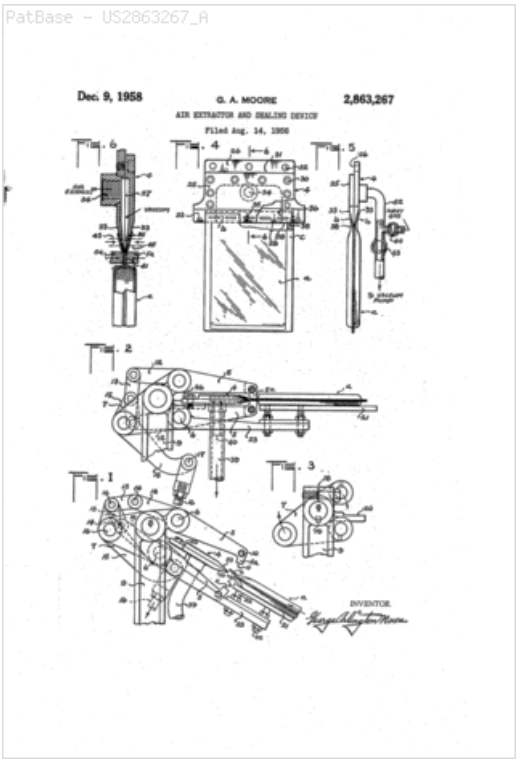
Title:	AIR EXTRACTOR AND **SEALING** DEVICE
Priority:	US19560604005 19560814

Family:

Publication number	Publication date	Application number	Application date
US2863267 A	19581209	US19560604005	19560814

Probable Assignee:	ARLINGTON MOORE GEORGE
Assignee(s):(std):	ARLINGTON MOORE GEORGE
Inventor(s):(std):	ARLINGTON MOORE GEORGE
Inventor(s):	MOORE GEORGE ARLINGTON
International class (IPC 8-9):	B65B31/06 (Advanced/Invention); B65B31/04 (Core/Invention)
International class (IPC 1-7):	B65B31/06
CPC:	B65B31/06
European class:	B65B31/06
US class:	426/410 53/374.9 53/434 53/479 53/512
Classification Explorer	
Cited documents:	US2634562 A, US2410834 A, US2281187 A, US2265381 A,
Forward Citations:	US6481185, US6302324, US6280787, US6142208, US6125613, US6112506, US6018932, US5989613, US5561964, US5551213, US5187917, US4919955, US4513015, US4409252, US3796020, US3404511, US3376690, US3347017, US3289387, US3193982, US3088255, US2016068289, US2005115205,

Abstract:
Source: US2863267A (Claim 1) An apparatus device for air evacuating and **sealing** commodity packed **containers** that are provided with nexible marginal wall portions defining the **open** mouth there of made adaptable to lit conjunctively in **sealed** relationship upon particular wall portions of an air extractor body **unit** provided in the apparatus comprising support means being provided for a main shaft of the apparatus that sup~ ports tt frame provided with multiple shaft supporting hubs, a pair of opposing hubs of said frame providing means of support for two shafts arranged in parallel and each shaft supporting a rocker arm that defines a pair of heat scaling irons having heating means embodied in the scaling bar portion of each iron, an air extractor body **unit** being provided in said apparatus and fixed in a posi~ tion that is substantially central betwen said pair of **sealing** irons and having connections with actuating means, the heated bar portion of each iron being arranged to close inwardly toward each other and meet together on the center line that passes transversely through the center of said main shaft and extending through the center of said air extractor body transverse of the longitudinal end thcrcof that dctincs the air suction mouth of said body and further defines the bottom longitudinal blunt corner edge of V-shaped wall surface portions provided on two opposing walls of the air extractor body, said edge having an elongated air suction slot through a portion thereof channclcd from a chamber space provided in the interior of said body that is connected with conduit means for vacuum, said V-shaped surfaces being provided with air suction passages arranged for vacuum **sealing** the mouth of an engaging commodity packed **container** over said mouth of the air extractor body **unit**, said **seal** being etfected while the air content of the **container** is substantially exhausted through said air suction slot in the 1ongi» tudinal corner edge of V-shaped wall surfaces enclosed by the **container**, said **sealing** irons being actuated and effecting a permanent **seal** of the **container** in seam forming relationship i_n close proximity outwardly of said longitudinal mouth of the air extractor body **unit** and said seam being formed while the air evacuated **container** is vacuum **sealed** conjunctively therewith,



75) Family number: 20758646 (US2950716A)

Title:	FLUID HANDLING METHOD AND APPARATUS
Priority:	US19560560675 19560123

Family:

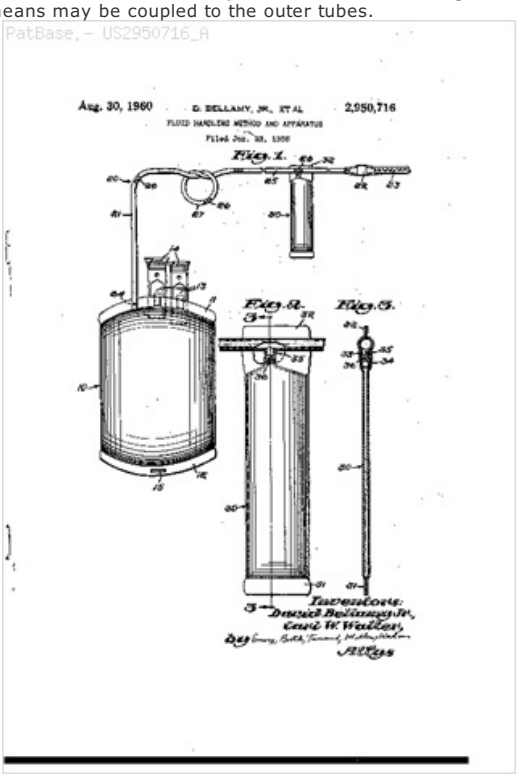
Publication number	Publication date	Application number	Application date
DE1138186 B	19621018	DE1957F022183	19570121
FR1171493 A	19590127		19570122
GB829656 A	19600302	GB19570002494	19570123
US2950716 A	19600830	US19560560675	19560123

Probable Assignee:	FENWAL LAB INC
Assignee(s):(std):	FENWAL LAB ; FENWAL LAB INC
Assignee(s):	FENWAL LABORATORIES INC
Inventor(s):(std):	WALTER CARL WALDEMAR ; WALTER CARL W ; BELLAMY JR DAVID ; BELLAMY DAVID
Inventor(s):	JR DAVID BELLAMY
International class (IPC 8-9):	A61B5/15 A61J1/00 A61J1/05 A61M1/02 (Advanced/Invention); A61J1/12 A61J1/14 (Advanced/Non-invention); A61B5/15 A61J1/00 A61J1/05 A61M1/02 (Core/Invention); A61J1/10 A61J1/14 (Core/Non-invention)
International class (IPC 1-7):	A61M1/02 A61M5/14 G01N33/50
CPC:	A61M1/0236 A61J1/10 A61B5/15003 A61B5/150221 A61B5/150366 A61B5/150992 A61J1/12 A61M1/0209 A61M2205/6063 Y10T137/4673
European class:	A61B5/14B A61B5/15B16 A61B5/15B2D A61B5/15B8D A61B5/15H A61J1/00T A61J1/10 A61M1/02 A61M1/02B K61J1/12 K61J1/14S K61M1/02B5 K61M205/60P
US class:	137/255 604/409 73/863.71 73/863.86

Classification Explorer

Cited documents:	US815192 A, US605178 A, US2832344 A, US2702034 A, US2698619 A, US2674265 A, US2663298 A, US2597715 A, US2518165 A, US2489394 A, US2230218 A, US1693189 A,
Forward Citations:	WO9212684, WO0007642, US9833606, US9789301, US9498616, US8956339, US8517970, US8262639, US8079997, US7824343, US7766854, US7699828, US7479131, US7384416, US7044941, US6994790, US5702383, US5685875, US5496301, US5442969, US5167656, US4994039, US4900321, US4846005, US4305443, US4056101, US3968195, US3654924, US3595086, US3467095, US3266298, US3211144, US3187750, US2010152681, US2008132875, US2006111687, US2006111658, US2005274673, US2005215975, US2005148993, US2005143712, US2004106890, US2004082899, US2003189069, US2003176813, US2003146170, JP60083637, FR2795647, FR2655532, EP1064959, EP0107579, EP0107579, DE8716004, AU642080,

Abstract:
Source: US2950716A 829,656. Administering therapeutic fluid. FENWAL LABORATORIES Inc. Jan. 23, 1957 [Jan. 23, 1956], No. 2494/57. Class 81 (2). In blood or other therapeutic fluid-administering apparatus having a fluid-receiving **container** with a flexible **sealable** inlet tube, a sample and storing device comprising an inert permeable pouch is connected to the inlet tube through which the pouch receives and **dispenses** fluid. A blood **storage** **bag** 10 is connected by flexible tubing 21 with a phlebotomy needle 22. Intermediate the needle 22 and the **bag**, a blood sample pouch 30 is connected by a conducting tube. The tubing, **bag**, and pouch are integrally formed from polyvinyl chloride and the needle is lined with dicocodimethyl ammonium chloride. Valve beads are provided in the inlets to the **bag** and the pouch respectively. Before use the pouch and the **bag** are free of air, the **bag** containing anti-coagulant. After inserting the needle 22 into the patient the conducting tube is deformed around the valve bead of the pouch so that sample blood enters the pouch. The valve bead of the **bag** is then displaced by manual manipulation of the **bag** inlet so that blood enters the **bag** for **storage**. A knot 27 in the tubing 21 is tightened to **seal** off the **bag**. The flexible tubing may be **sealed** off into sections along its length to provide additional samples, identifying indicia 26 being provided at intervals along the tubing. The **bag** has several outlet tubes 13 each **covered** by two **tabs** 14 **sealed** together to form a sheath, the **tabs** being separated or cut so that administering means may be coupled to the outer tubes.



76) Family number: 20855885 (GB901360A)

Title:	Improvements in or relating to the treatment of metallic melts
Priority:	CH19570053486 19571206

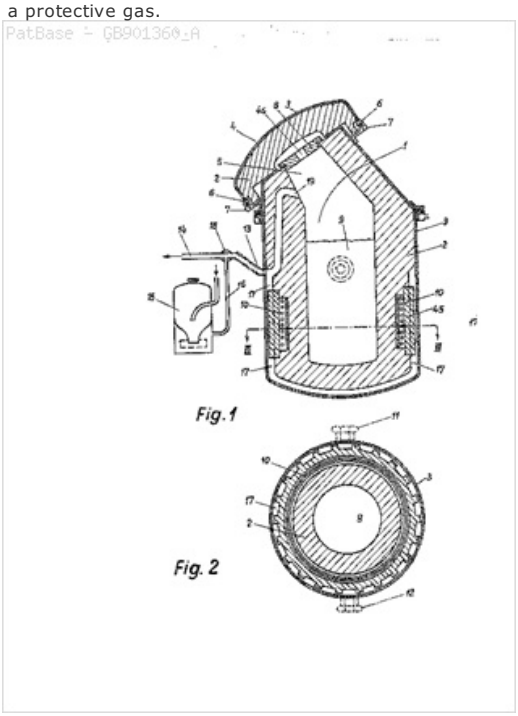
Family:

Publication number	Publication date	Application number	Application date
BE573627 A	19590401	BE19580573627	19581205
GB901360 A	19620718	GB19580039337	19581205

Probable Assignee:	FISCHER GEORG AG
Assignee(s):(std):	FISCHER AG GEORG ; FISCHER GEORG AG
Assignee(s):	GEORG FISCHER AG ; GEORG FISCHER AKTIENGESELLSCHAFT
International class (IPC 8-9):	C21C5/46 C21C7/10 (Advanced/Invention); C21C5/46 C21C7/10 (Core/Invention)
International class (IPC 1-7):	C21C C21C5/42 C21C5/46 C21C5/56
CPC:	C21C5/46 C21C7/10
European class:	C21C5/46 C21C7/10

Classification Explorer

Abstract:
Source: GB901360A 901,360. Refining metals. FISCHER A.G., GEORG. Dec. 5, 1958 [Dec. 6, 1957], No. 39337/58. Classes 72 and 82 (1). A method of treating a metallic melt to control the gas content and carbon content simultaneously comprises pouring the melt into a tiltable and transportable hermetically **sealable** **container**, closing the **container**, reducing the pressure, introducing a treating gas into the **container** and, after reacting gas and metal, replacing the treating gas with a protective gas and, if desired, adding alloying constituents to the melt. As shown, **container** 1 has a lid 4 **sealed** at 6 and an induction heating coil 10, or it may be heated by an electric arc. Line 13 is connected to valve 18 which selectively leads to vacuum line 14 or to gas supply line 16 from generator 15, and at its other end leads to ducts 17 between the refractory lining 2 and shell 3 of **container** 1 and to suction **opening** 19 above the melt 9. Separate outlets for slag and metal may be provided (Figs. 3 and 4, not shown). After charging, the lid 4 is closed and the **container** evacuated to a pressure of 200-50 Torr. During evacuation the melt boils and evolves occluded gas. At the same time a treating gas such as N 2, CO, H 2 O, CO 2, NH 3, CH 4 or homologues thereof, or mixtures of these gases diluted with rare gases may be introduced, or it may be advantageous to build up and reduce pressure repeatedly. The treating gas may be used to control the carbon, or nitrogen content of the melt within fine limits. When the melt has reached the desired composition, the treating gas may be pumped out and replaced by a protective gas such as a rare gas, CO, N 2, H 2, or CO 2, present in such proportions as to be in equilibrium with the melt or to recarburize it to a desired degree. This gas may be produced in a gas generator 15 supplied with oxygen and carbon dioxide, and a fuel low in sulphur and bitumen such as charcoal. The treating and protective gases may be dried by circulation through a drying column. Alloying additions may be made after the completion of the boiling process, a slight over-pressure of treating or protective gas being maintained while a **cover** is removed. The melt may be pre-refined in the **container** before **closure** by means of oxidizing gases or solids, and when treated it may be cast through a tube filled with a protective gas.



77) Family number: 22899583 (US2883913A)

Title:	METHOD AND MACHINE FOR MAKING A DRAWSTRING **BAG**
Priority:	US19580710298 19580121

Family:

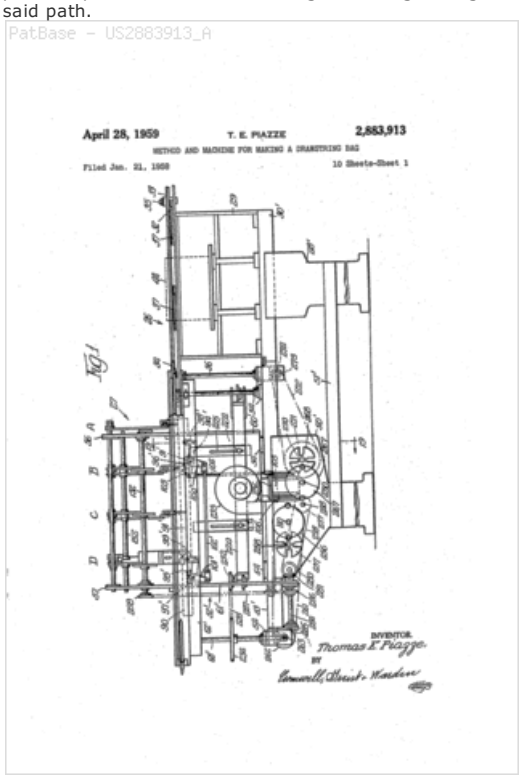
Publication number	Publication date	Application number	Application date
US2883913 A	19590428	US19580710298	19580121

Probable Assignee:	CONTINENTAL CAN CO
Assignee(s):(std):	CONTINENTAL CAN CO
Assignee(s):	CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC
Inventor(s):(std):	PIAZZE THOMAS E
International class (IPC 8-9):	B31B19/90 (Advanced/Invention); B31B19/00 (Core/Invention)
International class (IPC 1-7):	B31B21/74
CPC:	B31B70/8134 B31B70/00 B31B2160/10
European class:	B31B19/90 L31B219/90C2
US class:	112/470.21 493/213 493/226

Classification Explorer

Forward Citations: US6402377, US6343558, US6213040, US6059458, US4753629, US4717372, US4624654, US3910167, US3257090, US3104596,

Abstract:
Source: US2883913A (Claim 1) A method of providing a **bag** section of fle,,(ible rnaterial with a draw string **closure** in oile end thereof which -coniprises supporting a tubular section of **bag** forining material having aligned apertures adjarent the margins of flattened wall portions thereof on one of a pair of traveling pins by passing the pin through the aligned apertures, supportirig the pins for movement in oppositely disposed relation along a predetermined -path, engaging the pair of pins with a drawstring in the form of a closed loop so that the looped string is stretched between the pins as the pins advance along the path, moving the **bag** section onto the looped string, **opening** up and reforming the end of the tubular section to bring end wall portions into oppositely -disposed relation, folding the end margins of the tubular section inwardly between and over the portions of the _drawstring which extend between the apertures and securing said infolded mar.-ins to adjoining portions of the walls of the tubular segtion inwardly of the.drawstring to folm a hem which encases the drawstring with the looped end portions of the drawstring extending through the apertures and releasing the string from the traveling _pins at the end said path.



78) Family number: 22828028 (US2901098A)

Title: DISCARDABLE OR REUSABLE PLASTIC **PACKAGE**

Priority: US19540467992 19541110 US19590822325 19590623 US19590822326 19590623 US19620186573 19620316

Family:

Publication number	Publication date	Application number	Application date
US2901098 A	19590825	US19540467992	19541110
US3044610 A	19620717	US19590822325	19590623
US3044611 A	19620717	US19590822326	19590623
US3155233 A	19641103	US19620186573	19620316

Probable Assignee: REXALL DRUG CHEMICAL

Assignee(s):(std)**:** REXALL DRUG CHEMICAL ; TUPPER CORP

Assignee(s): REXALL DRUG AND CHEMICAL CO

Inventor(s):(std)**:** TUPPER EARL S

International class (IPC 8-9): B65D43/02 (Advanced/Invention); B65D43/02 (Core/Invention)

International class (IPC 1-7): B29C17/02 B65D17/06 B65D3/10 B65D41/22 B65D85/72

CPC: Y02W30/807 B65D43/027 B65D43/0218 B65D43/0268 B65D2101/0092 B65D2543/00092 B65D2543/00296 B65D2543/0037 B65D2543/00425 B65D2543/00509 B65D2543/00537 B65D2543/00555 B65D2101/0023 B65D2543/00546 B65D2543/00944

European class: B65D43/02S5B B65D43/02T5B B65D43/02T5B6 L65D101/00A3 L65D101/00A7 L65D543/00Y10R L65D543/00Y1F2C L65D543/00Y1M6 L65D543/00Y2F L65D543/00Y4 L65D543/00Y8D1C L65D543/00Y8D3 L65D543/00Y8D3N L65D543/00Y8D5

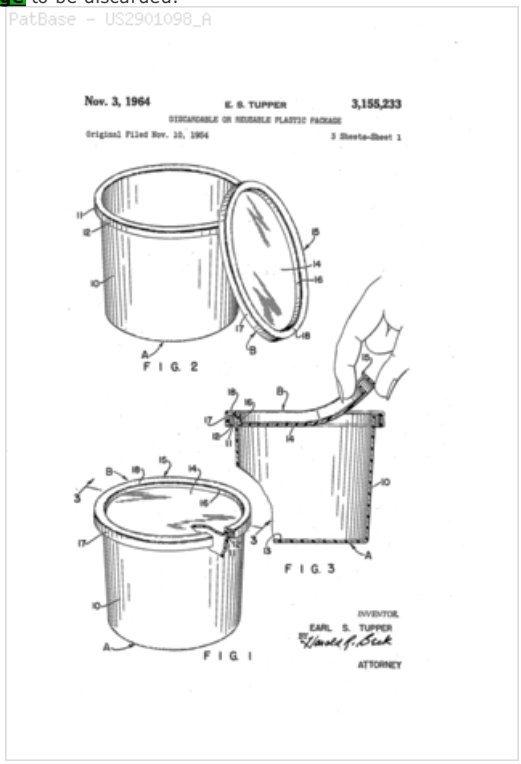
US class: 220/260 220/270 220/276 220/359.1 220/802 229/123.1 229/123.2 229/125.17 D7/629 D9/438

Classification Explorer

Cited documents: US3044610 A, US2901098 A, US2837236 A, US2805183 A, US2707588 A, US2695645 A, US2680558 A, US2661790 A, US2606586 A, US2487400 A, US2298421 A, US2235963 A, US2118565 A, US2110012 A, US2084264 A, US1946569 A, US1217599 A, US1180541 A, GB330785 A,

Forward Citations: USD793861, USD694112, USD643993, USD640547, USD634986, USD633387, USD624966, USD604642, USD583230, USD510867, USD467800, USD455321, US8777033, US7988002, US7658299, US7083044, US7017775, US5975346, US5810197, US5658228, US5653382, US5553701, US5490827, US5253772, US5185008, US5012928, US4809868, US4676392, US4442971, US4427705, US4427129, US4300700, US4124141, US3961443, US3773208, US3526335, US3339608, US3260775, US3155233, US3105607, US2990998, US2972432, US2016278361, US2012006840, US2011031246, US2009158511, US2008128380, US2006006178, US2005133508, US2002142738, FR2736617, FR2567492, FR2167894, DE1611956,

Abstract:
Source: US2901098A (Claim 1) 1. A self shape-retaining and pressure-sensitive, hermetically **sealed** and deformable **package** including contents **sealed** therein and adapted for selective discarding or reusability as a frictionally **sealable** **container** and co_ier after severance for removal of enclosed contents comprising a **container** and **cover** both being of thin gauge, pressure-sensitive and deformable material, the **container** having a bottom and side wall terminating in a rigidifying outwardly disposed peripheral riin flange having horizontal and skirt portions, a **cover** having a central wan, an upwardly extending side wall and a rigidifying outwardly disposed peripheral slide wall rim flange having horizontal and skirt portions, the side wall portion of the **container** adjacent the flange thereof being operative for frictional, telescopic and hermetical engagement with the **cover** side wall, the **cover** flange and the **container** flange being in abutting engagement, fusion means between the opposing faces of opposite portions of said flange skirt portions and tearing means disposed above said fusion means for severable disconnection therebelow of said flange skirt portions whereby the **package** may also serve selectively as a **container** and separate frictionaflyengageable **cover** therefor for reuse or as a separated **package** to be discarded.



79) Family number: 20551881 (GB819355A)

Title:	**DISPENSING** CARTONS AND LIKE **CONTAINERS** HAVING STRONG END **CLOSURES** AND METHOD OF MAKING THEM
Priority:	GB19550033916 19551125

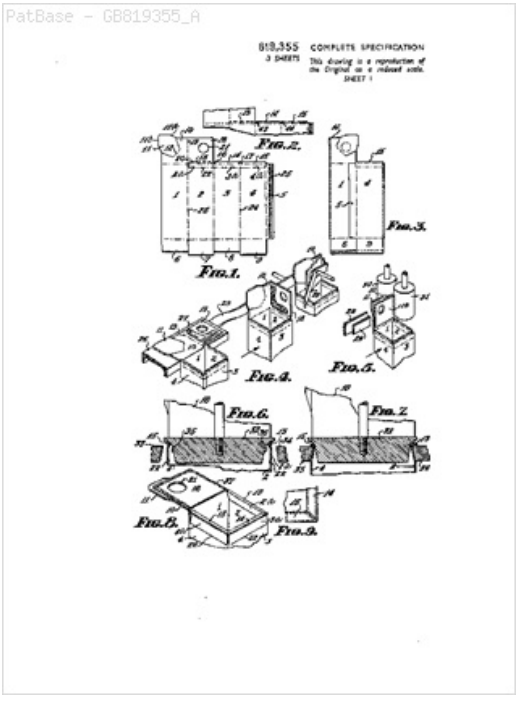
Family:

Publication number	Publication date	Application number	Application date
GB819355 A	19590902	GB19550033916	19551125

Probable Assignee:	FRANK DAVID BERGSTEIN
Assignee(s):(std):	FRANK DAVID BERGSTEIN ; ROBERT MORRIS BERGSTEIN
International class (IPC 8-9):	B31B17/00 B65D5/70 (Advanced/Invention); B31B17/00 B65D5/70 (Core/Invention)
International class (IPC 1-7):	B65D5/28
CPC:	B65D5/701 B31B2105/00 B31B2105/0022 B31B2110/30
European class:	B31B17/00 B65D5/70B L31B217/06E1 L31B217/08A

Classification Explorer

Abstract:
Source: GB819355A 819,355. Making boxes. BERGSTEIN, R. M., and BERGSTEIN, F. D. Nov. 25, 1955 [Dec. 20, 1954], No. 33916/55. Class 18. A one-piece paperboard **container** with tubular body walls 1-4 has an end **closure** comprising three outwardly extending flanges 13, 14, 15, articulated to the ends of the walls 2, 3, 4, and a full width flap 10 articulated to the end of wall 1 with a second flap 18 articulated to a side of the flap 10, the flaps 10, 18, being secured together face to face and adhesively secured to the flanges 13, 14, 15. The blank shown in Fig. 1, is formed into a tube by a **container** gluing machine and then inverted over a mandrel whereupon the bottom flaps 6-9 are infolded and **sealed** by pressure. The **container** is then placed upright in a cage or other conveyer and the flaps 10, 18 are jointly folded outwards to be supported by a horizontal plate at the same time separating the flap 18 from the flange 13 along the line for severance 20. Adhesive is applied to one of the flaps 10, 18 avoiding the region of the liftable flap 11, the flaps are elevated by a sweep and the flap 18 is folded onto the flap 10 by a folding bar, after which the flaps pass between pressure rollers to assure a good bond. An internal pressure member 32, Fig. 6, then enters the **container** and external pressure members 33, 34 co-act with ledges 35, 36 to bend inwardly the upper portions 2a, 4a, of the walls 2, 4, at the same time bending out the flanges 13, 15. The portion 3a and flange 14 are concurrently folded by similar means. A narrow peripheral strip of adhesive is applied round the under surface of the flap 18 and the flaps are folded down into adhesive contact with the flanges 13, 14, 15 which are then supported by fingers while a pressure plate applies **sealing** pressure. Cut out triangles 16, 17 will produce mitred comers if desired. The **container** is proofed internally by introducing a molten **sealing** substance and after closing the flap 11 an end casting 41 bonded to the walls and end is formed including a severable plug portion 42, Fig. 13. The liftable flap 11 is locked in closed position by crimping its extending portions 11a 11b over the edges of the flanges 14, 15. In a modification, the flanges may be folded out to extend outside the contour of the walls and larger flaps provided to **cover** the increased area. A narrow flange may also be provided on the fourth wall with the flush or extended end **closure**. The fold lines in the blank defining the flanges 13, 14, 15 and end portions 2a, 3a, 4a need not be preformed but may be marked by small vertical cuts only. In this case, when the **container** is placed over a mandrel 70, Fig. 20, for the bottom to be **sealed** under pressure plate 71, members 75, 76, 77 press the upper ends into recesses in the mandrel to deflect the walls inwardly and fold narrow flanges outwardly. The resilience of the paperboard allows the **container** to be removed and the upright **container** is then acted on by further members which move in to support the flanges while a pressure plate applied to the folded down flaps applies **sealing** pressure.



80) Family number: 22863068 (US3060652A)

Title:	PROCESS FOR **SEALING** **CONTAINERS**
Priority:	US19560625511 19561130 US19590806927 19590416

Family:

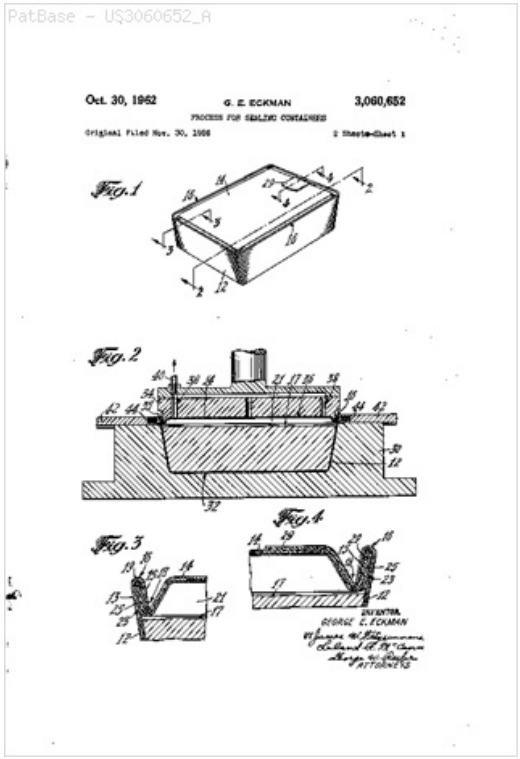
Publication number	Publication date	Application number	Application date
US2923453 A	19600202	US19560625511	19561130
US3060652 A	19621030	US19590806927	19590416

Probable Assignee:	AMERICAN CAN CO
Assignee(s):(std):	AMERICAN CAN CO
Assignee(s):	AMERICAN CAN COMPANY
Inventor(s):(std):	ECKMAN GEORGE E
International class (IPC 8-9):	B29C65/18 B65B7/28 B65D8/22 (Advanced/Invention); B29C65/18 B65B7/28 B65D8/04 (Core/Invention)
International class (IPC 1-7):	B65B7/28 B65D17/16 B65D41/10 B65D8/22
CPC:	B29C66/542 B29C65/18 B65B7/2878 Y10T29/49876 Y10T225/252 B29C66/8322 B29C66/112 B29C66/131 B65D17/4011
European class:	B29C65/18 B29C66/534 B65B7/28F4 B65D17/16B1
US class:	225/51 229/123.1 229/125.17 229/5.6 29/453 53/478 53/486 53/489

Classification Explorer

Cited documents:	US927801 A, US2942390 A, US2894361 A, US2825194 A, US2772043 A, US2729377 A, US2713423 A, US2665616 A, US2575544 A, US2196665 A, US2144194 A, US2100240 A, US2085847 A, US1706007 A, US1641743 A, US1085557 A,
Forward Citations:	WO9202330, US8943784, US6058682, US5715967, US5577370, US5191181, US5056296, US4888935, US4569474, US4549389, US4505423, US4387551, US4292787, US4285461, US4183458, US3962844, US3930353, US3874058, US3868917, US3752387, US3699305, US3508987, US3449183, US3338027, US3270483, US3252737, US3224163, US3216832, US3215300, US3200562, US3124295, US2015148208, US2012067765, DE2900625,

Abstract:
Source: US3060652A (Claim 1) The method of **covering** and expelling air from the head space of a filled **container** having a peripherally ex-tending inturned caret shaped channel on its body portion and an interlockable radially disposed flange on its interfitting **cover** with the interlockable portion being coated with a thermoplastic material comprising the steps of Alling said **container** to a level below said inturned channel within the **container** body, gripping a centrai portion of the outer surface of said **cover**, inserting said **cover** through said grip thereon into said **container** until said channel and flange pass one another to expel air from the **container** head space, withdrawing said **cover** through said grip thereon and increasing said head space until said channel and flange are interlocked in a loosely formed seam, and, while said **cover** is stili retained by said grip, applying heat and pressure to opposite sides of said loose seam to press the seam layers together and thus cause the thermoplastic material in the seam to **unite** the layers in a strong and effective bond.



81) Family number: 30984829 (US3106021A)

Title: CONTROL **UNIT** FOR DENTAL HANDPIECES

Priority: US19570666454 19570618 US19600015095 19600315

Family:

Publication number	Publication date	Application number	Application date
BE568510 A	00000000		00000000
FR1208423 A	19600223		19580611
GB857963 A	19610104	GB19580018200	19580606
US3062322 A	19621106	US19600015095	19600315
US3106021 A	19631008	US19570666454	19570618

Probable Assignee: DENTISTS SUPPLY CO

Assignee(s):(std)**:** BORDEN JOHN V ; DENTISTS SUPPLY CO

Assignee(s): DENTISTS SUPPLY CO OF NEW ; DENTISTS SUPPLY CO OF NEW YORK ; THE DENTISTS SUPPLY COMPANY OF NEW YORK

Inventor(s):(std)**:** BORDEN JOHN V

International class (IPC 8-9): A61C1/00 F16N7/34 (Advanced/Invention); A61C1/00 F16N7/00 (Core/Invention)

International class (IPC 1-7): A61C1/05 G05D13/00

CPC: A61C1/0007 F16N7/34

European class: A61C1/00C F16N7/34

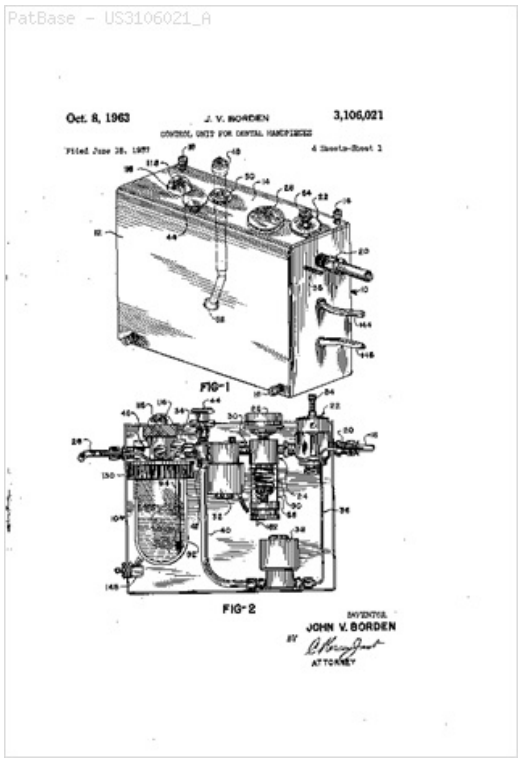
US class: 184/39.1 184/55.2 433/104 433/98 D24/176

Classification Explorer

Cited documents: US2902762 A, US2890765 A, US2855672 A, US2747688 A, US2696049 A, US2661537 A, US2613067 A, US2532054 A, US2318721 A, US2303458 A, US2214775 A, US2214774 A, US2061013 A, US1015258 A,

Forward Citations: US5738520, US5733117, US5314333, US5302123, US5282745, US4990087, US4486174, US4443195, US4420028, US3450229, US3250006, US3213966, GB2151752, EP0099487, DE10330518, DE10330518, CN105909957,

Abstract:
Source: GB857963A 857,963. Dental engines. DENTISTS' SUPPLY CO. of NEW YORK. June 6, 1958 [June 18, 1957], No. 18200/58. Class 81 (2) [Also in Groups XXIX and XXXIV] In a dental handpiece 52 of the fluid turbine type comprising a rotor supported by bearings in a turbine chamber, the bearings are lubricated by oil supplied in mist form. The handpiece 52 is adapted to be mounted in the casing 10 of a control **unit** which comprises a control valve 22, to which a compressed air supply line 18 is attached, an air filter 24, a solenoid-actuated delivery valve 32 and a lubricator 34. Also provided in the casing 10 is a water supply comprising conduit 36, control valve 38, conduit 40 and delivery conduit 46. The apparatus is operated electrically, full depression of a foot treadle causing delivery valve 32 to **open**, thereby permitting gaseous fluid to flow and water to be delivered to handpiece 52, whilst only partial depression of the foot treadle causes delivery of the water only. In a further modification, a solenoid actuated inlet valve 166, mounted in the lower portion of a casing 10, controls the delivery of gaseous fluid under pressure to a filter 180, the head 202 of which comprises an adjustable spring-pressed ball valve 206. A **sealed** water **container** 224 may be put under pressure by gaseous fluid, supplied through a manually controlled needle valve 218, to deliver water through a flexible conduit 228 to the handpiece. Alternatively a solenoid -actuated water control valve 38 may be employed.



82) Family number: 20797263 (GB880024A)

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Title: **CONTAINER** FOR LIQUID PRODUCTS AND METHOD OF MAKING SAME

Priority: DE1958M037921 19580611 GB19580018607 19580611

Family:

Publication number	Publication date	Application number	Application date
CH354383 A	19610515		19580610
DE1098344 B	19610126	DE1958M037921	19580611
FR1208390 A	19600223		19580609
GB880024 A	19611018	GB19580018607	19580611

Probable Assignee: MOORE GEORGE ARLINGTON

Assignee(s):(std)**:** GEORGE ARLINGTON MOORE ; MOORE GEORGE ARLINGTON

Inventor(s):(std)**:** MOORE GEORGE ARLINGTON ; GEORGE ARLINGTON MOORE ; BRESKIN CHARLES ALEXANDER

Inventor(s): ARLINGTON MOORE GEORGE

International class (IPC 8-9): B31B17/46 B65D5/32 B65D5/70 B65D5/72 (Advanced/Invention); B31B17/00 B65D5/00 B65D5/70 B65D5/72 (Core/Invention)

International class (IPC 1-7): B65D1/00 B65D5/70 B65D5/74

CPC: B65D5/324 B65D5/70 B65D5/72 B31B50/46 B31B2105/00 B31B2120/00

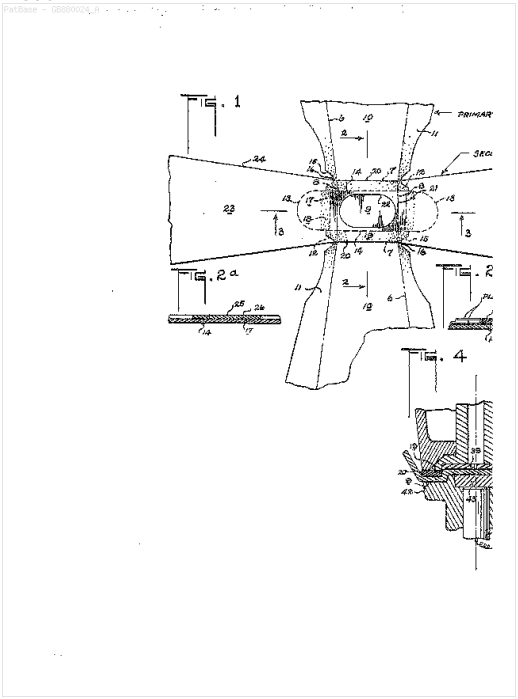
European class: B31B1/46 B31B17/00 B65D5/32B2 B65D5/70 B65D5/72 L31B201/26C3 L31B217/00

Classification Explorer

Cited documents: US2750097 A, US2296889 A, US2272203 A, US2234167 A, US2135855 A, GB377106 A, FR427691 A,

Forward Citations: EP1331173, EP1331173, DE4432718,

Abstract:
Source: GB880024A 880,024. Cartons. MOORE, G. A. June 11, 1958 [June 11, 1957], No. 18607/58. Class 18. A liquid tight **container** with a sterile lining of a synthetic plastic has a sanitary **dispensing** end Icosure. The **container** is formed of two blanks 4, 5, Fig. 1, of paperboard, cardboard, foil, or a synthetic plastic or a a lamination of aluminium and paper or paper and a synthetic plastic. The blank has a hole 22 plugged by an embossed portion 46, Fig. 9, of the panel 4. The raw cut edges are **sealed** by the lining of plastic and a **cover** of plastic encloses the small end. The blanks are secured over the area of the small end except for the portion between lines 14. Finger **tabs** 13 facilitate access to the **opening** 22. The **tabs** 13 also cause removal of the plastic **cover** enclosing the small end. The **container** is formed by a plunger 27 moved into a corresponding die 32 having heating rods 34 which cause **sealing** of thermo-plastic material on flaps 11. Platen heads 29, 36 deform the portion 46, Fig. 9, to form the plug for the hole 22. The plunger 27 has holes 31 to which a vacuum is applied to draw the blanks against the sides of the die. Symbols may be embossed on the small end. If the **container** is of fibrous material the walls may be impregnated with a coating material or a coating may be sprayed on after the **container** is made.



83) Family number: 20592638 (US3079919A)

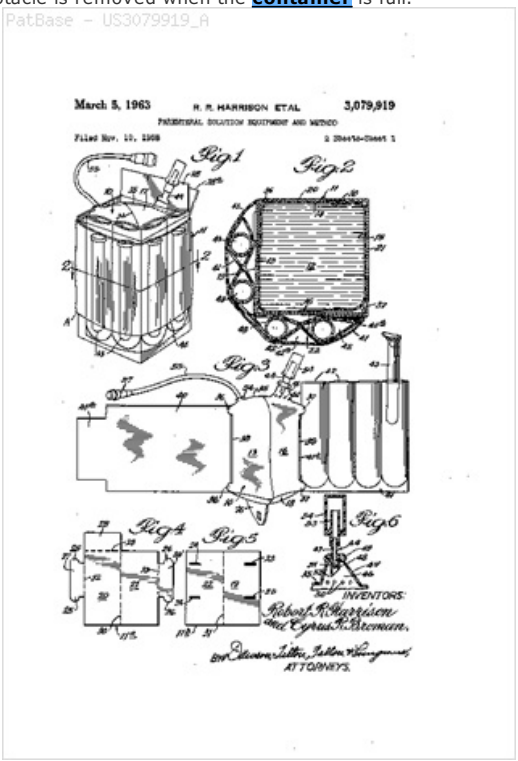
Title:	PARENTERAL SOLUTION EQUIPMENT AND METHOD
Priority:	US19580772951 19581110

Family:

Publication number	Publication date	Application number	Application date
BE584506 A	19600301	BE19590584506	19591110
CH386627 A	19650115	CH19590080437	19591110
FR1243567 A	19601014	FR19590809873	19591110
GB929965 A	19630626	GB19590038016	19591110
US3079919 A	19630305	US19580772951	19581110

Probable Assignee:	BAXTER LABORATORIES INC
Assignee(s):(std):	BAXTER LABORATORIES INC
Inventor(s):(std):	CYRUS R BROMAN ; ROBERT R HARRISON ; HARRISON ROBERT R ; BROMAN CYRUS R
Inventor(s):	R BROMAN CYRUS ; R HARRISON ROBERT
International class (IPC 8-9):	A61J1/00 A61J1/05 A61J1/10 A61M5/14 (Advanced/Invention); A61J1/12 A61J1/14 (Advanced/Non-invention); A61J1/00 A61J1/05 A61J1/10 A61M5/14 (Core/Invention); A61J1/14 (Core/Non-invention)
International class (IPC 1-7):	A61M1/02 A61M5/14
CPC:	A61J1/10 A61J1/12 A61M5/14
European class:	18B20B1 A61J1/00T A61J1/05B2 A61J1/10 A61M5/14 K61J1/12 K61J1/14S
US class:	141/316 229/117.33 229/122.21 604/260 604/408
Classification Explorer	
Cited documents:	US2894510 A, US2855933 A, US2853069 A, US2848995 A, US2838046 A, US2784716 A, US2618409 A, US2597715 A, US2584632 A, US2551164 A, US2549513 A,
Forward Citations:	WO09018388, US9782530, US9314403, US8992502, US8821471, US8323259, US5648206, US5425951, US5340592, US3937213, US3228395, US3211144, US3185154, US2012296308, US2009036863, FR2490095, FR2450752, EP0426475, CN104546457,

Abstract:
Source: US3079919A 929,965. Parenteral liquid **containers**. BAXTER LABORATORIES Inc. Nov. 10, 1959 [Nov. 10, 1958], No. 38016/59. Class 81 (2). A collapsible parenteral fluid **container** 10, which is flexible and translucent, has fluid inlet and outlet ports 45, 56 and is housed in a rigidwalled but collapsible receptacle 11 which when uncollapsed has an interior shape and size approximating to the shape and size of the **container** when filled. The collapsible **container** 10 has **tabs** 36, 37 along opposite side edges to which a flap 41, having pockets 42 for sample tubes 43, and a flap 40 are secured, respectively. The receptacle 11 is made from two sheets 11a, 11b of vinyl plastic, each sheet forming two receptacle walls and one sheet having **tabs** 27, 28 which engage slots 23, 24 of the other sheet. The receptacle is positioned around the **container**, the joins between the sheets being effected through slots 41a between the **container** and the flaps. To complete the assembly, the pocketed flap is wrapped over two walls of the receptacle and is **covered** by the other flap, a **tab** 40a of which is tucked into a slot 41a. Portions 45, 56 projecting from the exposed top wall 17 of the **container** are connected respectively to an inlet tube 55 having an end plug 57, which is pierceable by a hypodermic needle, and a sheathed outlet fitting 44 having a manipulatable ball valve. The **container** is made from two peripherally **united** superposed hexagonal sheets of synthetic plastic having projections which form the **tabs** 36, 37 and the portions 45, 56. Each sheet forms two sides of the **container**, the top and bottom walls being formed by joining each sheet to itself along lines 34 and excess material being cut away from the top wall and formed into a hanger 76 at the bottom wall. The joints along lines 34, and those formed between the sheets form diagonal reinforcing ribs across the top and bottom walls. The receptacle 11 has an upstanding **tab** 28 which before filling is folded at an angle to one side but which is pivoted into the plane of that side when filling of the **container** is complete. The receptacle is removed when the **container** is full.



84) Family number: 22540628 (US2935188A)

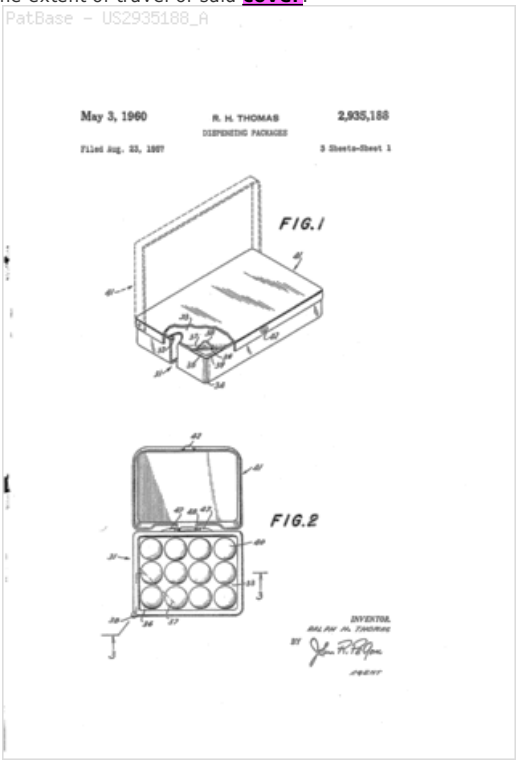
Title:	**DISPENSING PACKAGES**
Priority:	US19570679832 19570823

Family:

Publication number	Publication date	Application number	Application date
US2935188 A	19600503	US19570679832	19570823

Probable Assignee:	BRISTOL MYERS CO
Assignee(s):(std):	BRISTOL MYERS CO
Assignee(s):	BRISTOL MYERS COMPANY
Inventor(s):(std):	THOMAS RALPH H
International class (IPC 8-9):	B65D43/12 B65D43/16 (Advanced/Invention); B65D43/02 B65D43/16 (Core/Invention)
International class (IPC 1-7):	B65D85/56
CPC:	B65D43/12 B65D43/165 B65D2251/105
European class:	B65D43/12 B65D43/16C1A L65D251/10D4
US class:	206/532 220/258.2 220/345.4 220/844
Classification Explorer	
Cited documents:	US2834456 A, US2778519 A, US2777570 A, US2776787 A, US2775383 A, US2655259 A, US2558650 A, US2500549 A, US2378003 A, US2358270 A, US1915503 A, GB613944 A, GB550281 A, FR1121043 A,
Forward Citations:	WO0198166, US9701449, US5242696, US5204130, US5178295, US5019125, US4428497, US3904074, US3831808, US3286909, US3204810, US2014209497, NL1015484,

Abstract:
Source: US2935188A (Claim 1) 1. An article of manufacture comprising a tablet **dispenser** comprising a substantially rectangular **container** having spaced apart, double walls and an **open** end, a supply of tablets within said **dispenser**, a continuous flange comprising a dat **sealing** surface interconnecting said Walls in the plane of said **open** end, a Hexible **sealing** member overlying said **open** end, said **sealing** member being detachably secured to said **sealing** surface by means of a pressure sensitive adhesive coating applied to rn under, peripheral surface thereof, a **tab** on said **sealing** mem-ber projecting beyond the outer of said Walls adjacent one corner of said **container** whereby said **sealing** member may be grasped and a triangular portion thereof adjacent said one corner separated from said **sealing** surface thereby forming a triangular aperture in said **open** end through which single tablets may be **dispensed**, a **cover** having a pair of depending side walls, iianges on said side walls extending inwardly of said **cover** and adapted to slidably receive said **container** therebetween, bearing means on said **cover** spaced from said **sealing** member over said **open** end and bearing on said **sealing** member over said **sealing** surface whereby when said **cover** is closed said bearing means passes over said triangular portion and presses the same against said **sealing** surface to **reseal** said **container**, and stop means to iimit the extent of travel of said **cover**.



85) Family number: 22805654 (US2951644A)

Title:	**DISPENSING** DEVICE
Priority:	US19580707044 19580103

Family:

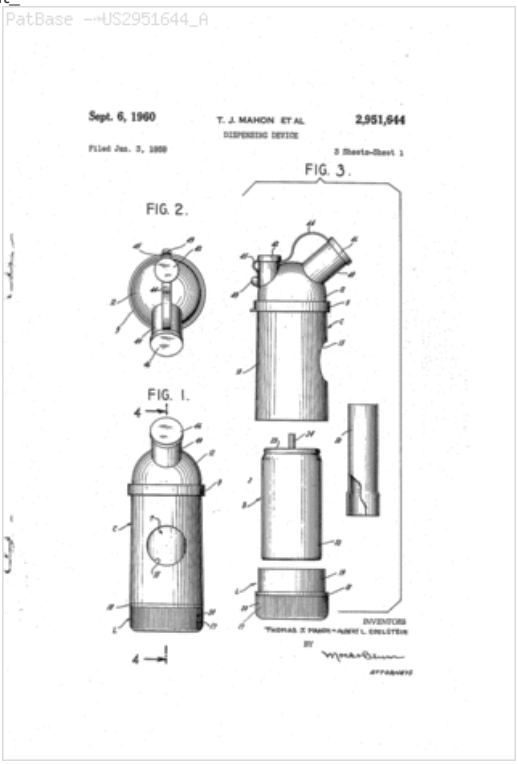
Publication number	Publication date	Application number	Application date
US2951644 A	19600906	US19580707044	19580103

Probable Assignee:	ASS FOR PHYSIOLOGIC RES INC
Assignee(s):(std):	ASS FOR PHYSIOLOGIC RES INC
Assignee(s):	ASSOCIATION FOR PHYSIOLOGIC RESEARCH INC
Inventor(s):(std):	EDELSTEIN ALBERT L ; MAHON THOMAS J
International class (IPC 8-9):	A61M11/06 (Advanced/Invention); A61M11/00 (Advanced/Non-invention); A61M11/06 (Core/Invention); A61M11/00 (Core/Non-invention)
International class (IPC 1-7):	A61M11/06 B05B7/30 B65D83/14
CPC:	A61M11/06 A61M11/002 A61M2205/8225
European class:	A61M11/06 K61M11/00A1 K61M205/82C3
US class:	222/162 222/182 222/402.12 222/402.13 239/308 239/335 239/338 239/343 239/524 239/573 239/577 D24/110

Classification Explorer

Cited documents:	US2731298 A, US2660132 A, US2602700 A, US2432660 A, US2181421 A, GB420711 A,
Forward Citations:	WO16066830, WO14028820, USD751670, USD605283, USD579104, USD561331, US9814849, US9707575, US9700689, US9572943, US9364618, US9352106, US9204625, US8844520, US8733342, US8550067, US8448637, US8397712, US8122881, US8074642, US8061352, US8001963, US7905229, US7905228, US7866316, US7634995, US7568480, US7559322, US7231919, US4836452, US4150071, US3915386, US3589606, US3464593, US3369756, US3302834, US3276699, US3272392, US3272391, US3269665, US3240397, US3206175, US3183687, US3119561, US3104062, US3084870, US3069097, US2014251320, US2014202457, US2009159080, US2008054099, US2007131230, US2007131224, US2007107719, US2007068514, US2007023036, US2006213507, US2003217748, US2003079742, JP44021598, JP2015533730, GB2432263, AU2013302488,

Abstract:
Source: US2951644A (Claim 1) 1. In a **dispensing** device, a normally upright casing, a head on the upper end of said casing formed with a central Llirough socket and an upwardly facing trough, a dome **covering** said head on the upper end of said casing and having an outwardly inclined discharge spout, a propellent **container** recei-ved in spaced relation in said casing beneath said head, an upstanding normally closed discharge nipple on said **container** and extending snugly into said socket for fluid communication therethrough, said nipple being **openable** upon relative displacement between vaid **container** and nipple and resiliently urged out of said displaced relation to close said nipple, and a nebulizing fitting carried by said head _interiorly of said dome and communicating with said nipple and trough for aspiration of'Ruid from said trough by propellent'from said **container** and the projection of said fluid and propellent through said discharge spout_



86) Family number: 22809506 (US2952954A)

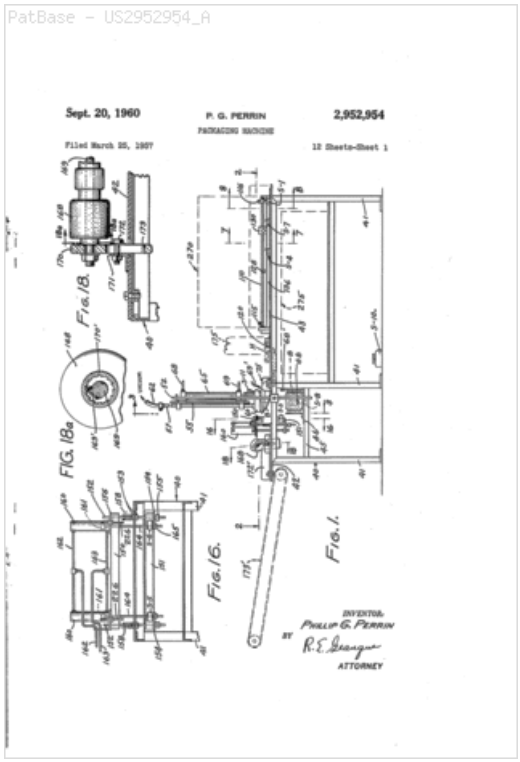
Title:	**PACKAGING** MACHINE
Priority:	US19570648086 19570325

Family:

Publication number	Publication date	Application number	Application date
US2952954 A	19600920	US19570648086	19570325

Probable Assignee:	PERRIN PHILLIP G
Assignee(s):(std):	PERRIN PHILLIP G
Inventor(s):(std):	PERRIN PHILLIP G
International class (IPC 8-9):	B65B43/28 B65B5/06 (Advanced/Invention); B65B43/26 B65B5/06 (Core/Invention)
International class (IPC 1-7):	B65B43/28 B65B5/06
CPC:	B65B5/067 B65B43/28
European class:	B65B43/28 B65B5/06S
US class:	53/258 53/374.8 53/459 53/571 53/64
Classification Explorer	
Cited documents:	US2766569 A, US2746221 A, US2725168 A, US2689073 A, US2685995 A, US2301354 A, US2001009 A, US1950186 A,
Forward Citations:	US7363753, US5351466, US5265397, US5046305, US3750365, US3491514, US3490195, US3468102, US3427780, US3363397, US3228171, US3174260, US3165870, US3059390, US2006162291, US2004134090, EP0549487, DE1278323, DE1223739,

Abstract:
Source: US2952954A (Claim 1) 1. A **packaging** machine for **packaging** articles in a heart-**sealable** **bag** having a mouth end, comprising: a frame provided with a compartment for containing a stack of iiat, heat-**sealable** **bags**; a **bag**-positioning means reciprocable in a path normal to the plane of each ilat **bag** and operative to transfer ra **bag** from the stack to a position remote therefrom; means on the frame operative to partially **open** the mouth of the transferred **bag**; movable **bag**-**opening** and -holding elements operative, when extended in unc direction, to entcr the party-**opened** mouth of the positioned **bag** so as to fully **open** and shape the mouth for the reception of articles therein, said elements together denning a guideway therebetween when they are in their extended, substantially parallel position; -a carrier reciprocablc on the frame and adapted to support rarticles for insertion into the positioned **bag**, said carrier being movable in one direction through said guideway into the positioned **bag** so as to insert me articles thereinto, and being operative to strip the **bag** from said elements and to advance the **bag** and its contents to n **sealing** station; means engageable with the **bag** so -advanced to retain the same at said station, said carrier being movable in the opposite direction to cause it to be vvithdrawn from the advanced **bag**; heat-**sealing** rneans at said station operative to fuse the sides of the **bag** mouth together; operating means for actuating said bagypositioning means, said **bag**-holding elements, said carrier and' said hcabsealing means; and control means for effecting operation of said operating means- in. sef quence. -_ _ Y '



87) Family number: 22809516 (US2952959A)

Title:	**CONTAINER** FILLING AND CLOSING MACHINE
Priority:	US19570660299 19570520 US19590861577 19591223

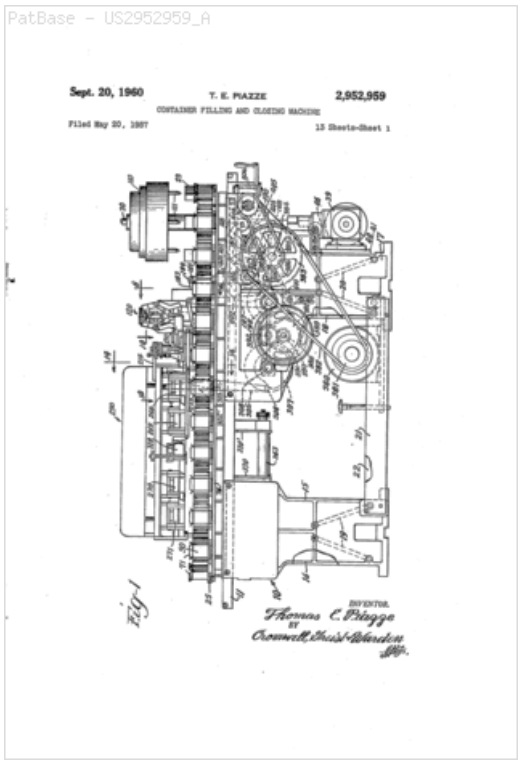
Family:

Publication number	Publication date	Application number	Application date
US2952959 A	19600920	US19570660299	19570520
US3065839 A	19621127	US19590861577	19591223

Probable Assignee:	CONTINENTAL CAN CO
Assignee(s):(std):	CONTINENTAL CAN CO
Assignee(s):	CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC
Inventor(s):(std):	PIAZZE THOMAS E
International class (IPC 8-9):	B65B43/54 B65B7/06 (Advanced/Invention); B65B43/42 B65B7/00 (Core/Invention)
International class (IPC 1-7):	B65B43/54 B65B7/06
CPC:	B65B43/54 B65B7/06
European class:	B65B43/54 B65B7/06
US class:	198/704 198/803.15 53/284.7 53/370.6 53/371.7 53/506 53/53
Classification Explorer	
Cited documents:	US958252 A, US708759 A, US2766571 A, US2732988 A, US2689636 A, US2681727 A, US2676443 A, US2624995 A, US2553683 A, US2511714 A, US2134567 A, US1979496 A, US1831388 A, US1816126 A, US1791303 A, US1695272 A,
Forward Citations:	US5507132, US5480372, US5463848, US5463845, US4546592, US3982376, US3830360, US3137397, EP0346610, EP0183085,

Abstract:

Source: US2952959A (Claim 1) A ba.- closing machine having a continuously travel- ing hoiizontal conveyor for supporting filled **bags** in upright position, a **bag** top tuckin- station, a fixed stand adjacent said station and a **bag** top tucking device mounted for vertical adjustment on said stand, said tucking device comprising a pair of outer tucking fingers swingably mounted on a supporting bracket, two pairs of inner folding fingers for cooperation with the outer tucking fingers, the flngers of each pair of said inner folding fingers being pivotally mounted on supporting members, said supporting members being pivotally mounted on the 135 supporting bracket for lateral movement, said supporting bracket being attached to a vertical slide plate, said sude plate being slidably mounted for vertical movement on a horizontal tracl, plate, said horizontal track plate being mounted for horizontal sliding movement on said stand, ineans to move said slide plate and said track plate in timed relation to the movement of the conveyor to position said tucking and folding fingers vertically for engagement with the top marginal portions of each successive baand to advance the same horizo-_itally with each **bag** -' g a predetermined portion of its movement, and durin means to pivot the tucking and folding fingers relative to each otl_ler to infold end wall portions of the **bag** top and to bring the opposed side wall portions thereof into flat folded relation.



88) Family number: 22845266 (US2958942A)

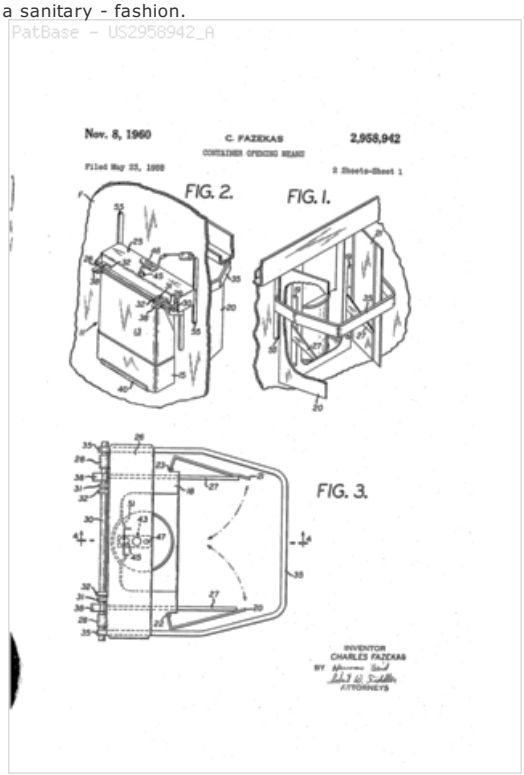
Title:	**CONTAINER OPENING** MEANS
Priority:	US19580737288 19580523

Family:

Publication number	Publication date	Application number	Application date
US2958942 A	19601108	US19580737288	19580523

Probable Assignee:	PNEUMAFIL CORP
Assignee(s):(std):	PNEUMAFIL CORP
Inventor(s):(std):	CHARLES FAZEKAS
Inventor(s):	FAZEKAS CHARLES
International class (IPC 1-7):	B67B7/30
CPC:	B67B7/24
European class:	64B28B B67B7/46
US class:	219/229 30/140 30/406 30/447
Classification Explorer	
Cited documents:	US2840900 A, US2840899 A, US2765005 A, US2713198 A, US2603858 A, US2032688 A, US1505578 A, FR1107332 A,
Forward Citations:	US3263326, US3204336, US3066410, US3054178,

Abstract:
Source: US2958942A (Claim 1) 1. Means for **opening** **containers**, said means comprising: enclosing means within which the **container** to be **opened** may be positioned; **openable** **closure** means on said enclosing means; **container** piercing means within said enclosing means; and movable control means carrying said piercing means and moving against said **closure** means to **open** same to permit insertion of a can into said enclosure means, and actuating said piercing means to pierce a **container** within said enclosing means, whereby the **container** may be **opened** in a sanitary - fashion.



89) Family number: 29880045 (US3042271A)

Title:	**CONTAINER** WITH RETRACTABLE PROJECTABLE SPOUT
Priority:	US19590830654 19590730

Family:

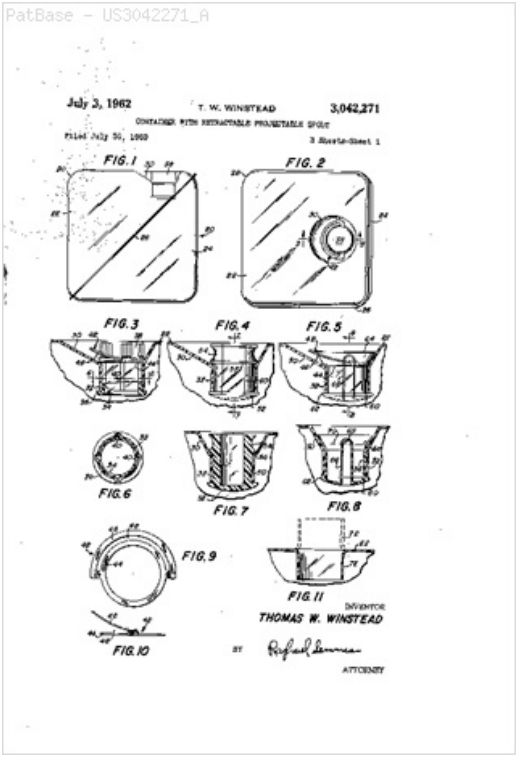
Publication number	Publication date	Application number	Application date
DE1170862 B	19640521	DE1960H038670	19600216
FR1249596 A	19601230	FR19600819210	19600222
GB901615 A	19620718	GB19600004839	19600211
SE301612 B	19680610	SE19600012939	19600302
SE301612 B	19680610	SE19630012939	19631122
US3042271 A	19620703	US19590830654	19590730

Probable Assignee:	HEDWIN CORP
Assignee(s):(std):	HEDWIN CORP
Inventor(s):(std):	WINSTEAD T ; WINSTEAD THOMAS W ; WINSTEAD THOMAS WILLIAMSON ; WINSTEAD T W
International class (IPC 8-9):	B65D25/44 B65D47/06 B65D77/04 B65D77/06 (Advanced/Invention); B65D25/38 B65D47/06 B65D77/04 B65D77/06 (Core/Invention)
International class (IPC 1-7):	B65D5/40
CPC:	B65D25/44 B65D47/063 B65D77/0426 B65D77/065
European class:	B65D25/44 B65D47/06A1 B65D77/04C2 B65D77/06B2
US class:	220/758 222/183 222/529 222/530

Classification Explorer

Cited documents:	USD186971 S1, US36478 A, US351010 A, US2981443 A, US2954901 A, US2911128 A, US2861718 A, US2814420 A, US2804242 A, US2795362 A, US2774523 A, US2758755 A, US2717727 A, US2687831 A, US2628912 A, US2628911 A, US2574931 A, US2561596 A, US2530253 A, US195093 A, US1190612 A, GB688534 A, GB688531 A, GB631370 A, FR1183171 A, DE1762150 U,
Forward Citations:	WO9104465, WO05047169, WO05047169, USD668543, USD617635, US9610604, US9573150, US9566594, US9381536, US9327308, US9174234, US9089869, US8474658, US8387817, US8342372, US8167170, US8132693, US8113385, US7681783, US6637623, US5961009, US5797525, US5641099, US5176294, US5058780, US4961518, US4569464, US3885672, US3856187, US3690522, US3580434, US3375949, US3326421, US3325030, US3307746, US3297195, US3291331, US3268112, US3251510, US3248002, US3200986, US3171573, US3162330, US3160326, US3152730, US3090526, US2015223645, US2014053945, US2011031270, US2010327015, US2008041018, US2006180643, US2005178776, NL1007170, EP2499408, EP0905047, EP0905047, EP0445264, EP0129934, DE3829741, DE2747352, AU634827,

Abstract:
Source: GB901615A 901,615. **Containers**; **container** **closures**; boxes. HEDWIN CORPORATION. Feb. 11, 1960 [July 30, 1959], No. 4839/60. Classes 18, 66 and 125(3) A **container** formed of a flexible thermoplastic material, e.g. polyethylene, has a retractable spout comprising a web portion 30, a cylindrical neck 32 and a member 34 fitting within the neck 32, a **tab** 42 being provided on a ring 44 by means of which the spout may be pulled out, flanges. 36 on the member 34 causing the neck 32 to reverse itself. A screw **closure** 38 is fitted to the spout; and the member 34 has ribs 40 to prevent its rotation in the neck 32. In modifications, a **closure** plug 50, Fig. 7, replaces the member 34 and cap 38, the upper end of the plug having a finger-grip recess 54; or, Fig. 8, the central part of the bottom of a plug has an upward nipple the top of which is cut off before **dispensing** the **container** contents. As shown in Fig. 15 the member 34 is divided by a rib 83 into two areas 84, 85, the rib acting on the neck portion, as it is pulled out, to double it back so that in its extended position it encloses the area 85, Fig. 16 (not shown). The **container** may be inserted in a carton, Fig. 14 (not shown), the inner flap **covers** of which have registering semi-circular cut-out portions one of the outer flaps having a perforated portion to provide access to the spout and the outer and inner flaps being glued together. Either of the body halves 22, 24 of the **container** may be collapsed into the other half. Specifications 863,024 and 872,065 are referred to.



90) Family number: 22851762 (US2976660A)

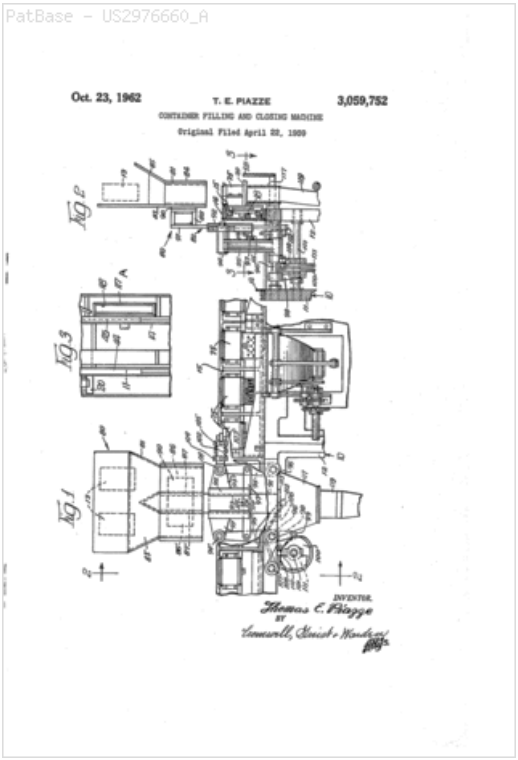
Title:	**CONTAINER** FILLING AND CLOSING MACHINE
Priority:	US19590808112 19590422 US19610085078 19610126

Family:

Publication number	Publication date	Application number	Application date
US2976660 A	19610328	US19590808112	19590422
US3059752 A	19621023	US19610085078	19610126

Probable Assignee:	CONTINENTAL CAN CO
Assignee(s):(std):	CONTINENTAL CAN CO
Assignee(s):	CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC
Inventor(s):(std):	PIAZZE THOMAS E
International class (IPC 8-9):	B65B43/42 B65B7/08 (Advanced/Invention); B65B43/42 B65B7/00 (Core/Invention)
International class (IPC 1-7):	B65B43/42 B65B7/08
CPC:	B65B43/42 B65B7/08
European class:	B65B43/42 B65B7/08
US class:	198/463.2 53/284.7 53/371.7 53/525 53/570
Classification Explorer	
Cited documents:	US2888125 A, US2766571 A, US2641882 A, US2634852 A,
Forward Citations:	US3313089, US3229803, US3228167, DE3628952,

Abstract:
Source: US2976660A (Claim 1) 1. A **bag** filling and elcising inachine having an upright supporting frame structure, a chain conveyor mounted on end sprockets which are supported on longitudinally spaced vertically extending axes arranged at oppos-ite ends bf said frame structlire, a series of **bag** slipporting assemblies mounted in spaced relatioii on said conveyor, said assemblies each comprisin._ a supportin.- bracket having an upright portion attached to the conveyor and a horizontal portion extendin.- outwardly thereof, said liorizontal portion having laterally spaced side arm members which define the sides of an **opening** exteiiding iiiwardly to said upright portion and a **bag** supporting plate member motinted in said **opening**, said supportin- plate mem- 1,,3 ber having laterally extending, axially aligned pivot pins at the outer ends of the side edges, said side arm members havin- elongate slots for rece-1ving said pivot pins in sliding pivotal relation therein, tension springs connected to said side arm members and said pivot pins and normally urging said supporting plate member toivard said upright portion, a ledge formation (_gt;n said upright portion positioned to support the inner ed-c of said supporting plate member when it is in horizontal position, a cam member on the bottom face of said supporting plate member adjacent the ol-iter edge thereof and means on said frame structure for forcing said cam member outwardly to release said supporting plate member for downward and outward swin.-ing movemeiit about said pivot pins whereby to allow a **bag** supported thereon to drop vertically through said **opening** for discharge from the conveyor. .



91) Family number: 22039983 (US2976657A)

Title:	**PACKAGING** WITH VARIATIONS OF **PACKAGE** LENGTH
Priority:	US19580767615 19581016

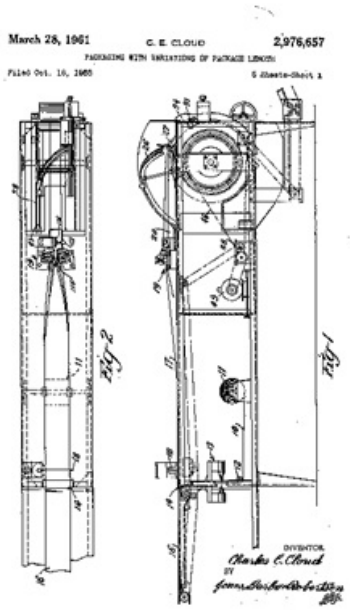
Family:

Publication number	Publication date	Application number	Application date
GB916428 A	19630123	GB19590028592	19590821
US2976657 A	19610328	US19580767615	19581016

Probable Assignee:	WILLIAM S CLOUD
Assignee(s):(std):	CLOUD CHARLES E ; WILLIAM S CLOUD
Assignee(s):	CHARLES E CLOUD
Inventor(s):(std):	CLOUD CHARLES E
International class (IPC 8-9):	B65B59/02 (Advanced/Invention); B65B59/00 (Core/Invention)
International class (IPC 1-7):	B65B59/02
CPC:	B65B59/02
European class:	B65B59/02
US class:	53/550 53/75
Classification Explorer	
Cited documents:	US2871639 A, US2837883 A, US2815620 A, US2657510 A, US2636731 A, US2269532 A, US2113078 A,
Forward Citations:	WO08107917, US7434374, US6357211, US4881360, US4817366, US4704843, US4305240, US4045946, US3992851, US3982374, US3943683, US3942304, US3902301, US3490194, US3344581, US3344576, US3294012, US3126682, US2007186513, DE1270478,

Abstract:
Source: GB916428A 916,428. Wrapping-machines. CLOUD, C. E. Aug. 21, 1959 [Oct. 16, 1958], No. 28592/59. Class 94(1). A wrapping machine, Fig. 3, has a continually rotating member 23 to which at least one **unit** 21 can be coupled to move therewith and perform an operation on a wrapping 20 that moves along part of the path of the member 23, the **unit** 21 following a cycle of movement that returns it to a rest position where it is released from the member 23 until it is again required. The wrapping material commences as a film 10, Fig. 1, that is drawn from a roll 11 past a photocell 13 scouring marks made on the film, said marks being spaced apart according to the size of the article to be packed in the film. Articles to be wrapped are fed by a belt conveyer 16 on to the film 10 as it moves along a table 17 the feeding of the articles being controlled by a magnetic stop 18 that may be controlled by the photocell 13. The film 10 and the articles thereon pass through a tubeforming **unit** 19 and on to a turret where the **unit** 21 performs an end-**sealing** and severing operation. As shown in Fig. 3 the turret comprises a continuously moving disc member 23 and a plurality of the **units** 21 which initially line up behind a stop-bar 22 that prevents them from rotating with the member 23. Each **unit** 21 carries a wrapper clamping arm 24 that can pivot transversely to the direction of movement of the **unit**, this arm in the rest position of the **unit** 21, being held in a raised position by cam rails 81. When the photocell 13 is operated by a mark on the film 10, the stop-bar 22 is temporarily withdrawn to permit the first of the **units** 21 assembled at the rest station to seize the turret disc 23 and to move therewith. This movement of the **unit** 21 causes a part 26 of the cam rails 81 to lower the pivoted clamping arm 24 to a nearly closed position between adjacent articles in the tubular **package**. The **unit** 21 then carries the arm 24 below a hinged plate 27 whereafter it is pressed firmly to a closed position by a pressure cam 28 to effect a transverse heat **seal**, the heating means 77, Fig. 6, being in the **unit** 21. Each clamping arm 24 carries a severing blade 31 which is movable therein and shortly before discharge of the **packages**, the **unit** 21 passes a freely rotatable thrust drum 32 which presses the knife blade 31 inwardly to cut the tube within its **sealed** area, so that the tube remains heat **sealed** on both sides of the line of severance. The severed **package** 33 then drops to a conveyer 36 which, together with a conveyer 37, removes the completed **package**. The clamping arm 24 is then released by the pressure cam 28, so that it hangs vertically, whereupon it is again caught up by the cam rails 81 as the **unit** 21 returns to its rest position. Adjustments and control. Since the **units** 21 do not seize the continually rotating turret disc 23 until a signal is received from the electric eye **unit** 13, any sized article can be **packaged** provided that a **packaging** reel 11 is used that has appropriately spaced marks thereon for the size of the articles to be packed. Should a clamping arm 24 fall upon an article, instead of between adjacent articles, it will then deflect the hinged plate 27 as it passes thereunder to operate a switch and stop the machine. Instead of the stop gate 18 being controlled by the electric eye 13, it may be controlled by a trigger lever 91 seen at the 12 o'clock position in Fig. 3, this trigger being actuated by the passing **units** 21. Tube forming **unit**. As the clamping arms 24 pull the **packaging** material along the table 17, the **packaging** material is drawn about the articles to be **packaged** and the edges of the material then enter a Vee-notch where they are caught up under a pair of spring loaded rollers 11, Fig. 11, set to drag the **packaging** material tightly about the article to be **packaged**. As the Vee-notch narrows the edge portion of the wrapper that are eventually pressed together are heat **sealed** by a **unit**, preferably between two hinged clamps, biassed together by gravity and having sledlike runners engaging the wrapper. Clutch **units**. The **units** 21 are carried on rollers that ride in grooves formed in the turret disc 23 and by one member 65, Fig. 5, that is flattened on opposite sides so that when it is in the full line 'position it will ride freely in the groove 58 and when pivoted to the broken line position it will act on a clutch in the groove 58 to releasably seize the turret drive disc 23. Motion is in the direction of the arrow. The clutch member 65 is fast on its shaft and to this shaft is secured a clutch lever 67, the lever being pushed forwardly by a spring 68 in the **unit** 21 to urge the clutch member 65 to bind in the groove 58. As the **units** 21 queue behind the stop member 22, the lever of the leading **unit** 21 is pressed against the stop member 22, and the levers 67 of the other **units** in the queue are each pressed against the next **unit** ahead, thus releasing the **units** 21 from the continually rotating disc turret.

PatBase - US2976657_A



92) Family number: 22076069 (US2979995A)

Title:	APPARATUS FOR CLOSING AND **SEALING** LINED **CONTAINERS**
Priority:	US19600005290 19600128

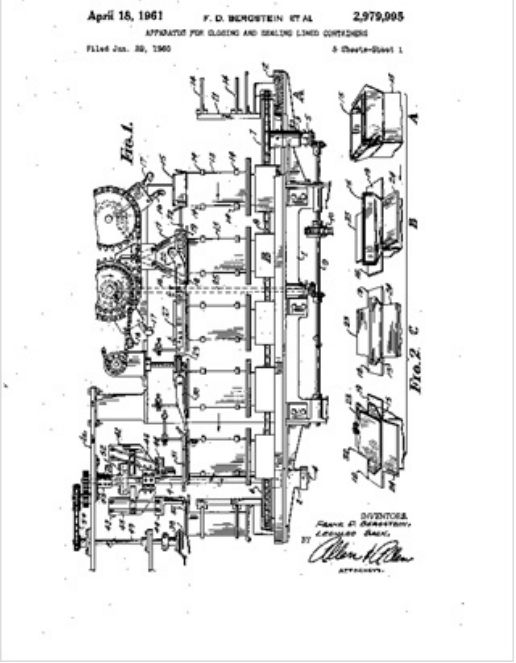
Family:

Publication number	Publication date	Application number	Application date
GB966547 A	19640812	GB19610000702	19610106
US2979995 A	19610418	US19600005290	19600128

Probable Assignee:	BERGSTEIN PACKAGING TRUST
Assignee(s):(std):	BERGSTEIN PACKAGING TRUST ; FRANK DAVID BERGSTEIN ; ROBERT MORRIS BERGSTEIN
Inventor(s):(std):	LEONARD BACK ; BERGSTEIN FRANK D
Inventor(s):	BACK LEONARD
International class (IPC 8-9):	B65B7/18 (Advanced/Invention); B65B7/16 (Core/Invention)
International class (IPC 1-7):	B31B7/60 B65B7/18
CPC:	B65B7/18
European class:	B65B7/18
US class:	493/131 493/144 493/326 493/337 53/373.6 53/373.8 53/374.4 53/374.5 53/376.5 53/376.7
Classification Explorer	
Cited documents:	US2328758 A, US2277289 A,
Forward Citations:	WO0044619, US6764576, US5887412, US5642599, US4551964, US4518379, US4236368, US4063403, US3483803, US3451194, JP4290344, JP2002535210, EP0279486, EP0279486,

Abstract:
Source: GB966547A 966,547. **Packaging** machines. R. M. BERGSTEIN, and F. D. BERGSTEIN. Jan. 6, 1961 [Jan. 28, 1960], No. 702/61. Heading B8C. A **packaging** machine for closing and **sealing** lined **containers** comprises conveyer means having a first straight-line section provided with means to **open** the **closure** flaps at the upper end of each **container** and flatten and **seal** the mouth of a liner projecting therefrom, an intermediate arcuate section with means to engage and fold the leading and trailing **closure** flaps and to fold downwardly a third **closure** flap and a second straight-line section for folding and **sealing** the remaining **closure** flaps. A **container** 13 is placed on one of a number of interspaced carriage members 11 carried by a conveyer chain 8 mounted on a pair of horizontally disposed sprockets 6 and 7 and the **container** when locked by a coacting pair of arms 14 advanced with an upstanding liner portion 15 towards a pair of spreading fingers 16, 17 which flatten and elongate the mouth and in addition outfold the leading and trailing end **closure** flaps 18, 19, which are engaged by a hold-down bar 20, whilst a pair of sweeps 21, 22 simultaneously engages and outfolds end **closure** flaps 23, 24. The liner then passes between heating elements 26, 27 to activate a heat **sealable** coating on the liner, whereupon a pair of coacting pressure wheels 28, 29 **seals** the walls of the liner and the **sealed** end is contacted by a sweep 30 folding over the projecting end of the liner, which in turn is contacted by a hold-down plate 31 prior to the **container** entering the arcuate section, provided with a folding arm 33, a folding plate 32 and a rotary sweep 39. The folding arm 33 has a downwardly inclined leading part 34, a horizontally disposed intermediate part 35 and an upwardly inclined trailing part 36 with the configuration allowing upward folding of the leading and trailing flaps 18, 19 and holding down of the end **closure** flap 24 so that the latter may be engaged by a sweep 37 (Fig. 7), thereby assuring an unobstructed function of the rotary sweep in completing the folding of the end flap 19 prior to it being engaged by a sweep 38. During the advancement of the **container** along the arcuate path, the folding plate, which facilitates the folding of the liner along the articulation of flaps 18, 19 travels radially in and out by means of a pantograph linkage 43 fixed to a turret 41. As the **container** enters the second straight-line section of the machine the undersurface of the **closure** flap 23 is contacted by a sweep 55 which raises the flap into a vertical position for contact with a knurling wheel 56 to provide an embossed area 61 (not shown), extending along the flap 23, to facilitate an adhesive bond. If the surface of the flap is laminated with a foil, the knurling wheel may actually puncture the foil so as to provide interstices into which the adhesive may flow and bond. As the flap 23 is engaged by the knurling wheel, a sweep 64 aligns the **closure** flap 24 horizontally for passage between guide plates 65, 66 which position the flap for contact with a wheel 67, which is continuously or intermittently operated, and applying to the upper surface of the flap a strip of quick-setting thermoplastic adhesive 70, with the latter juxtaposed to the embossed area 61 of flap 23 by means of the sweeps 79, 78, whereupon the **closure** flaps are contacted by a pressure roller 80, which is followed by a series of spring-pressed rollers 82, whereupon the **container** arrives at the discharge station. In another embodiment (not shown), the guide plates 65, 66 may be replaced by an adjustable arm carrying a roller so as to secure a positive contact of the flap with the applicator wheel. To ensure satisfactory bonding of the quick-setting adhesive, the flap 23 is preheated by a heating **unit** 77 and the adhesive strip 70 is heated in a heating chamber 73 prior to deposition on the applicator wheel 67. U.S.A. Specification 2,114,622 is referred to.

PatBase - US2979995_A



93) Family number: 29768530 (US3297244A)

© PatBase

Title: CENTRIFUGE AND RECEPTACLE ASSEMBLY THEREFOR

Priority: DE1965H057212 19650918 FR19600830431 19600618 FR19630931993 19630419 FR19650032089 19650921 GB19650038398 19650908 US19590822561 19590624 US19620192709 19620507 FR19640973152 19640430 FR19650031782 19650917 US19640392567 19640827 US19640387942 19640806 US19630277759 19630503 US19630268396 19630327

Family:

Publication number	Publication date	Application number	Application date
DE1150534 B	19630620	DE1960B058265	19600618
DE1295889 B	19690522	DE1964H052578	19640502
DE1296842 B	19690604	DE1963H049054	19630504
DE1598537 A1	19691002	DE19651598537	19650918
FR1260968 A	19610512	FR19600830431	19600618
FR1360423 A	19640508	FR19630931993	19630419
FR1397578 A	19650430	FR19640973152	19640430
FR1448431 A	19660805	FR19650032089	19650921
FR88696 E	19670310	FR19650031782	19650917
GB1044430 A	19660928	GB19650038398	19650908
GB878606 A	19611004	GB19600021745	19600621
GB976206 A	19641125	GB19630013930	19630408
GB976207 A	19641125	GB19640017319	19630408
GB993114 A	19650526	GB19640018205	19640501
US3096283 A	19630702	US19590822561	19590624
US3239136 A	19660308	US19620192709	19620507
US3244362 A	19660405	US19630277759	19630503
US3244363 A	19660405	US19630268396	19630327
US3297243 A	19670110	US19640387942	19640806
US3297244 A	19670110	US19640392567	19640827
UST955355 H	00000000		00000000

Probable Assignee: BECTON DICKINSON CO

Assignee(s):(std)**:** BECTON DICKINSON CO ; GEORGE NORTON HEIN ; HEIN GEORGE N

Assignee(s): BECTON DICKINSON AND CO ; BECTON DICKINSON AND COMPANY

Inventor(s):(std)**:** N HEIN GEORGE ; HEIN GEORGE NORTON ; HEIN GEORGE N

International class (IPC 8-9): B04B1/00 B04B11/04 B04B11/06 B04B5/00 B04B5/04 G01N33/49 (Advanced/Invention); B04B1/00 B04B11/00 B04B5/00 G01N33/49 (Core/Invention)

CPC: Y10T279/17752 Y10T292/0848 G01N33/491 B04B1/00 B04B5/00 B04B5/0428 B04B11/04 B04B11/06

European class: B04B1/00 B04B11/04 B04B11/06 B04B5/00 B04B5/04B4 G01N33/49C

US class: 192/14 220/501 220/666 220/737 279/75 292/44 494/1 494/10 494/16 494/26 494/27 494/30 494/38 494/40 494/43 494/45 494/48 494/84 494/85

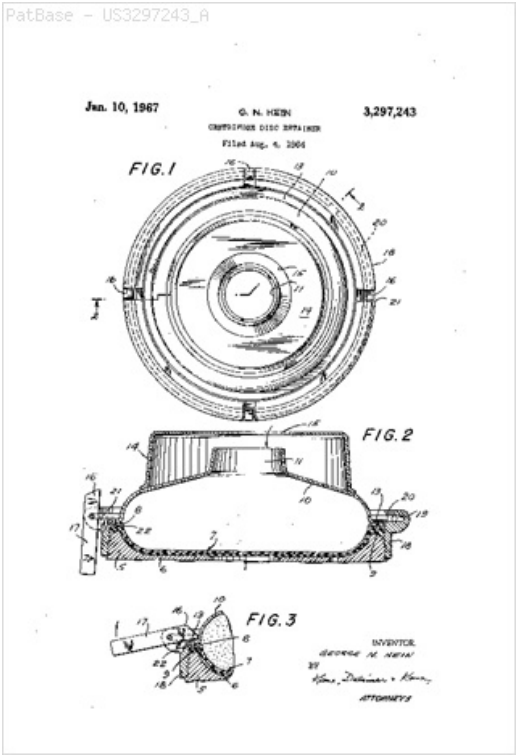
Classification Explorer

Cited documents: US987613 A, US955355 A, US739081 A, US3179334 A, US3168473 A, US3145173 A, US3133882 A, US3129175 A, US3104225 A, US3096283 A, US3064647 A, US3022937 A, US3009388 A, US2898037 A, US2885145 A, US2883103 A, US2712896 A, US2702034 A, US2661150 A, US2656263 A, US2578484 A, US2542456 A, US2412099 A, US2272675 A, US2186836 A, US2173579 A, US2141025 A, US2106986 A, US2104162 A, US2023762 A, US1949278 A, US1751982 A, US1735692 A, US1709939 A, US1640707 A, US1534604 A, US1483484 A, US1303203 A, SE66298, GB469338 A, FR971978 A, FR1260968 A, FR1250997 A, DE252907 A, DE1082552 A,

Forward Citations: WO8900084, WO8706844, WO8502561, WO8502560, WO8402091, WO10076657, WO05025754, WO05025754, WO04018021, WO04018021, WO0245863, USD798468, USD798467, USD798466, USD759266, USD759265, US9849222, US9833794, US9789243, US9364600, US9302042, US9248227, US9114408, US9095665, US9079194, US9028388, US8974362, US8870733, US8834402, US8808978, US8808217, US8758211, US8747291, US8702637, US8685258, US8647289, US8628489, US8617042, US8562501, US8556794, US8485958, US8475352, US8469871, US8454548, US8394006, US8317672, US8287742, US8277406, US8236184, US8173027, US8120760, US8075468, US8057377, US7998052, US7981019, US7833185, US7819793, US7811463, US7708889, US7708710, US7648639, US7648452, US7594663, US7497944, US7473216, US7452322, US7425192, US7413665, US7407472, US7396451, US7347932, US7332125, US7311849, US7279107, US7235041, US7166217, US7128838, US7097774, US7090633, US7060018, US6905453, US6899666, US6852074, US6824506, US6746601, US6740239, US6689042, US6656105, US6641552, US6632191, US6602179, US6582349, US6558307, US6511411, US6379322, US6348031, US6296602, US6261217, US6228017, US6168561, US6123655, US6102883, US6074335, US6071421, US6027441, US6019716, US6007725, US5993370, US5935051, US5842965, US5804079, US5792372, US5690835, US5690602, US5656163, US5551942, US5549834, US5529691, US5427695, US5370802, US5362291, US5360542, US5316667, US5316666, US5312319, US5266273, US5257968, US5188583, US5171539, US5160310, US5067938, US5000730, US4854933, US4807845, US4798577, US4795419, US4734089, US4718888, US4692136, US4636193, US4617009, US4530691, US4509941, US4464161, US4432748, US4430072, US4427406, US4422941, US4405079, US4397637, US4392846, US4347971, US4177921, US4157780, US4142670, US4056225, US4007871, US3997103, US3987961, US3982691, US3880592, US3819111, US3804324, US3801004, US3771715, US3737096, US3674197, US3561672, US3485445, US3480207, US3460749, US3456875, US3441205, US3434657, US3407812, US3350104, US3333765, US3297244, US3297243, US3274756, US3249295, US3244363, US3244362, US3240425, US3239136, US3211368, US3185154, US3145713, US3145173, US3133881, US2011237418, US2011077140, US2011028295, US2010234788, US2010026986, US2009309308, US2009272701, US2009259164, US2009259163, US2009259162, US2009215602, US2009211989, US2009127206, US2009008307, US2008314822, US2008283473, US2008220959, US2008149564, US2008093312, US2008053203, US2007284320, US2007262531, US2007213191, US2007209708, US2007203444, US2007084807, US2007084806, US2006270542, US2006240964, US2006040818, US2006021952, US2005143244, US2005137516, US2005113237, US2005059540, US2005054508, US2005045567, US2005009680, US2004217069, US2004147865, US2004147386, US2004144788, US2004104182, US2003220181, US2003211927, US2003173274, US2003125182, US2003102272, US2002185820, JP54002692, JP52145578, GB2187663, FR2504028, FR2415485, FR2404471, FR2392725, FR2392725, FR2350885, FR2236179, FR2236179, EP1306135, EP1306135, EP0245703, EP0160637, EP0015047, EP0014093, DK152261, DE4340678, DE4340678, DE2901907, DE2501924, DE1296842, DE1295889, CN102240613, AU567710, AU2009334385,

Abstract:

Source: GB1044430A 1,044,430. Centrifugal separators. G. N. HEIN. Sept. 8, 1965, No. 38398/65. Heading B2P. In a centrifuge for separating blood into its constituents and of the type described in Specification 993, 114, the plastics receptacle 7 is retained in position upon the rotor head 5 during centrifugation by means of two or more pivotable lugs each of which has a clamping part 16 which is moved by centrifugal force into a position in which it clamps the receptacle in place when the head is rotated. The lugs are pivoted on a wire 20 Fig. 2 (not shown) held in a groove 19 in a ring 18 screwed on to the head 5. Each lug has a long arm portion 17 which swings outwardly under the action of centrifugal force so as to swing the short arm portion 16 downwards into clamping position. After a centrifuging operation, the arm portion 16 is clear of the receptacle and allows its **cover** 10 to be easily removed and replaced.



94) Family number: 23743329 (US3217951A)

Title: **CLOSURE** MEANS FOR **CONTAINERS**

Priority: DE1961H037686U 19610330

Family:

Publication number	Publication date	Application number	Application date
CH402729 A	19651115	CH19620002393	19620227
DE1832772 U	19610608	DE1961H037686U	19610330
GB950542 A	19640226	GB19620008351	19620305
US3217951 A	19651116	US19620176678	19620301

Probable Assignee: HESSER MASCHF AG

Assignee(s):(std)**:** FR HESSER MASCHF F AG ; FR HESSER MASCHINENFABRIK AG F ; HESSER AG MASCHF ; HESSER MASCHF AG

Assignee(s): HESSER MASCHINENFABRIK AKTIENGESELLSCHAFT ; FR HESSER MASCHINENFABRIK AKTIENGESELLSCHAFT ; FIRMA FR HESSER MASCHINENFABRIK AKTIENGESELLSCHAFT ; FR HESSER MASCHF AG ; FR HESSER MASCHF AG FA

Inventor(s):(std)**:** HANS PAAL

Inventor(s): PAAL HANS

International class (IPC 8-9): B65D17/50 B65D47/36 B65D5/70 B65D5/72 B65D8/02 (Advanced/Invention); B65D47/00 B65D8/00 (Core/Invention)

International class (IPC 1-7): B65D17/06 B65D17/16 B65D47/36 B65D8/02

CPC: B65D17/28 B65D5/708 B65D5/72 B65D15/08 B65D17/502 B65D2517/0013 B65D2517/0029 B65D2517/0037 B65D2517/0061 B65D2517/0079 B65D2517/0083 B65D2517/5032 B65D2517/5051 B65D2517/5083

European class: B65D15/08 B65D17/16 B65D17/50A1 B65D5/70E B65D5/72 L65D517/00Y2B L65D517/00Y4B L65D517/00Y5B L65D517/00Y7A1 L65D517/00Y7C3 L65D517/00Y7D2 L65D517/50M10B L65D517/50P1B L65D517/50Q5

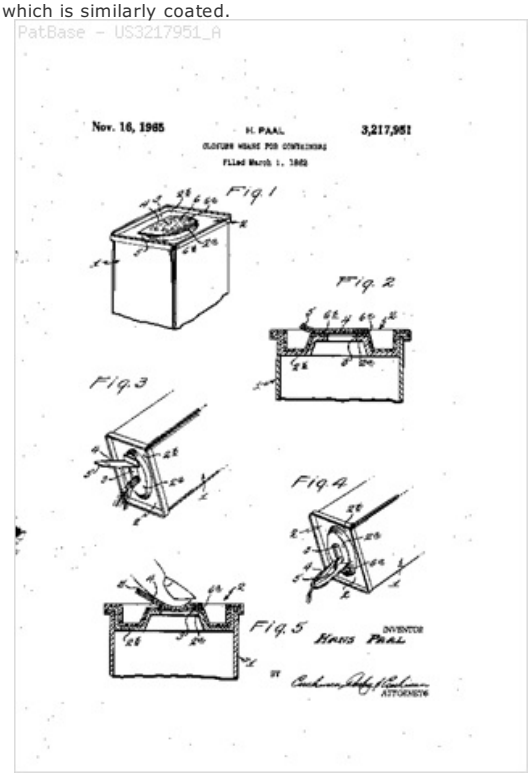
US class: 220/265 222/528 222/556 222/566 229/123.1 229/125.14 229/125.19

Classification Explorer

Cited documents: US3108708 A, US2870935 A, US2715982 A, US2617563 A, US2353521 A, US2338604 A, US1596638 A, US1473453 A, US1261260 A, CA613023 A,

Forward Citations: WO08058579, US8468782, US8240546, US8153216, US8056209, US4981256, US4811848, US4807787, US4582216, US4516689, US4165004, US3977591, US3889844, US3871550, US3371811, US3353738, US3298577, US3292828, US3275203, US2008232721, US2008203141, US2008193059, US2008063320, US2008044525, US2007278116, US2006249475, US2004074955, GB2396853, GB2396853, EP0816283, EP0254968, EP0254968, DE2849756, AU596855,

Abstract:
Source: GB950542A 950,542. **Container** **closures**. FR. HESSER MASCHINENFABRIK A.G. March 5, 1962 [March 30, 1961], No. 8351/62. Headings B8P and B8T. An elongated **dispensing** **opening** 3 in a raised portion 2a of an end wall of a **container** is closed by a flexible **tab** 4 heat-**sealed** along lines 6a, 6b surrounding the **opening**. A lip 5 facilitates the pulling back of the **tab** 4 to the joint 6a to **open** the **container**. The joint 6a may be curved so that the **tab** 4 can be formed into a **dispensing** trough, Fig. 4. After breaking the **seal** the **opening** may be closed by depressing the **tab** into it. The end wall may be of polyethylene or a coating thereof on cardboard, and the **tab** may be of aluminium sheet which is similarly coated.



95) Family number: 22200623 (US2990101A)

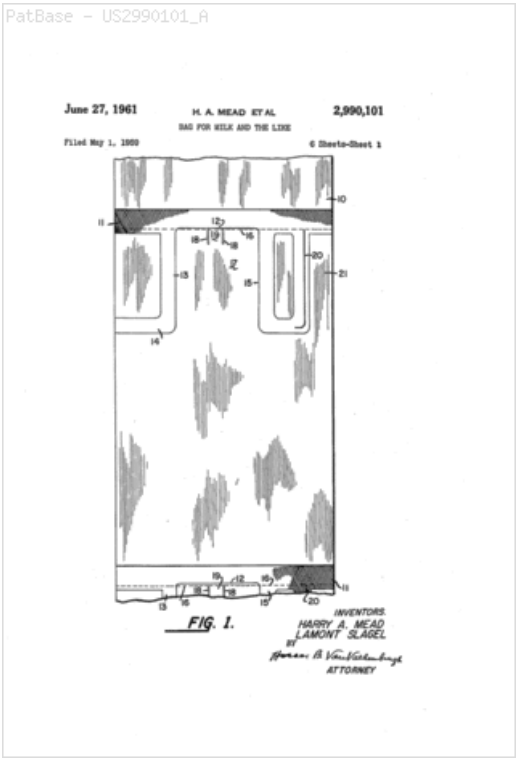
Title:	**BAG** FOR MILK AND THE LIKE
Priority:	US19590810454 19590501

Family:

Publication number	Publication date	Application number	Application date
US2990101 A	19610627	US19590810454	19590501

Probable Assignee:	DAIRY CONTAINERS INC
Assignee(s):(std):	DAIRY CONTAINERS INC
Inventor(s):(std):	MEAD HARRY A ; LAMONT SLAGEL
Inventor(s):	SLAGEL LAMONT
International class (IPC 8-9):	B65D75/58 (Advanced/Invention); B65D75/52 (Core/Invention)
International class (IPC 1-7):	B65D85/72 B65D85/80
CPC:	Y10S383/904 Y10S383/906 B65D75/5861
European class:	B65D75/58G
US class:	222/107 222/541.6 383/200 383/202 383/35 383/41 383/904 383/906
Classification Explorer	
Cited documents:	US2935241 A, US2866488 A, US2800269 A, US2708067 A, GB730235 A, GB690614 A, FR1154361 A, FR1128387 A,
Forward Citations:	US9751656, US7950850, US7837386, US7077309, US5343903, US5115626, US4981374, US4964515, US4961930, US4900377, US4892769, US4891454, US4886697, US4885200, US4882213, US4795270, US4600104, US3815794, US3721360, US3403822, US3326449, US3304977, US3221942, US3166220, US3156383, US3150573, US3148803, US3143277, US3142437, US3116854, US2009173047, US2006285775, US2005017011, US2004197030, US2003134059, US2003053720, FR2600975, EP1876112, EP0388822, EP0388822, EP0372688,

Abstract:
Source: US2990101A (Claim 1) A **bag** for milk and the like, comprising front and rear walls formed of a heat **sealable** plastic material and connected together at their imperforate side edges; a heat **seal** connecting said walls together across the bottom of said **bag**; a first transverse heat **seal** extending inwardly from one edge of said **bag** at the top thereof; a longitudinal heat **seal** extending from said first transverse heat **seal** and downwardly in spaced relation to said edge; a heat **seal** extending laterally from the lower end of said downwardly extending, longitudinal heat **seal** to said edge; a second transverse heat **seal** extending from the opposite edge of said **bag** to a point spaced from said first transverse heat **seal**, the unsealed portion of the top of said **bag** between said first and second transverse heat **seals** providing a filling portion; a pair of slots in spaced relation extending downwardly in said unsealed portion from the top of said **bag** to form **tabs** to facilitate separating the walls of said unsealed portion; a generally U-shaped heat **seal** extending downwardly from said second transverse heat **seal** and in spaced relation to said opposite edge; and a slot extending downwardly from the top of said **bag** and within the portion of said U-shaped heat **seal** adjacent said opposite edge, the lower end of said slot extending laterally and away from said opposite edge and into the lower portion of said U-shaped heat **seal**, so as to separate the portion of the upper end of said **bag** between said slot and said adjacent edge, whereby the upper end of said separated portion may be severed below said second transverse heat **seal** to provide a spout for discharging the contents of said **bag**.



96) Family number: 22937020 (US3107774A)

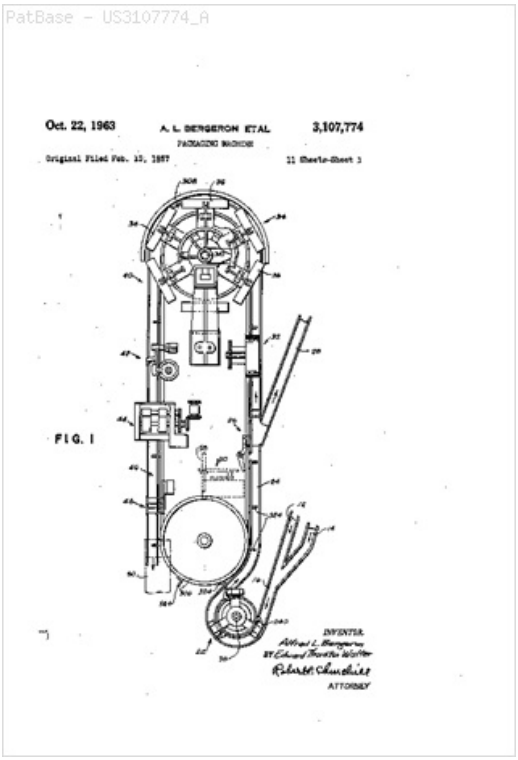
Title:	**Packaging** machine
Priority:	US19570639919 19570213 US19600074435 19601207

Family:

Publication number	Publication date	Application number	Application date
US2996855 A	19610822	US19570639919	19570213
US3107774 A	19631022	US19600074435	19601207

Probable Assignee:	PNEUMATIC SCALE CORP
Assignee(s):(std):	PNEUMATIC SCALE CORP
Assignee(s):	PNEUMATIC SCALE CORP LTD
Inventor(s):(std):	BERGERON ALFRED L ; THORNTON WALTER EDWARD
Inventor(s):	WALTER EDWARD THORNTON
International class (IPC 8-9):	B65B43/52 B65B7/18 (Advanced/Invention); B65B43/42 B65B7/16 (Core/Invention)
International class (IPC 1-7):	B65B43/52 B65B7/18
CPC:	B65B43/52 B65B7/18
European class:	B65B43/52 B65B7/18
US class:	198/444 198/449 198/451 198/531 53/175 53/370.6 53/371.5 53/371.6 53/526 53/53 53/77
Classification Explorer	
Cited documents:	US2907443 A, US2806580 A, US2729928 A, US2698624 A, US2678124 A, US2619216 A, US2454477 A, US2287957 A, US2257777 A, US2018807 A, US2008970 A, US1909319 A, US1412227 A, US1068323 A, GB245273 A,
Forward Citations:	US7856792, US4546592, US4364465, US3910407, US3691718, US3389532, US3359702, US3279580, US3224550, US2009188209, FR2310260,

Abstract:
Source: US3107774A (Claim 1) In a **packaging** machine having provision for foldin.and **sealing** the lining mouth of a f!Jled lined carton dun'ng the continuous tdva-_ice of the carton, in combination, a main coiveyer for s-apporting and advancina the cartons in spaced relatioi tlirough the machine, a pair of cartoi-i supply con- ;eycrs, a br'_d.-e plate commtinicating,_vith said ra'r of conveyers, means for releasing the foremost carton in each of said supply conveyers alternately to form 'a S;ngle lin.- of cartn-ns on said bridge plate, means for transferring the carto-_is in predeterm-ined spaced relation from said bridf.,e plate to said main conveyer, and means intermediate the releasin.- means a-_id sa;d transfer means for engag'inr,, aiid advancing the cartons in timed relation to said transfer means.



97) Family number: 22238342 (US2998158A)

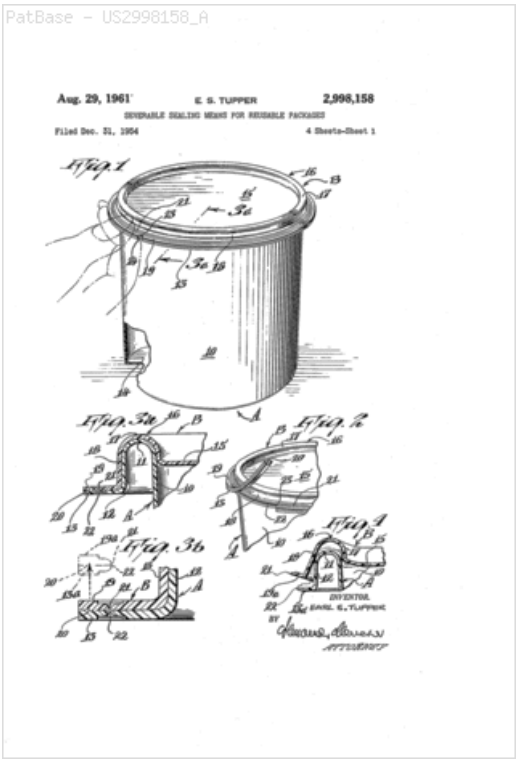
Title:	SEVERABLE **SEALING** MEANS FOR REUSABLE **PACKAGES**
Priority:	US19540479044 19541231

Family:

Publication number	Publication date	Application number	Application date
US2998158 A	19610829	US19540479044	19541231

Probable Assignee:	REXALL DRUG CHEMICAL
Assignee(s):(std):	REXALL DRUG CHEMICAL
Assignee(s):	REXALL DRUG AND CHEMICAL CO ; REXALL DRUG AND CHEMICAL COMPANY
Inventor(s):(std):	TUPPER EARL S
International class (IPC 8-9):	B65D43/02 (Advanced/Invention); B65D43/02 (Core/Invention)
International class (IPC 1-7):	B29C17/02 B65D41/60
CPC:	Y02W30/807 B65D43/0268 B65D43/0254 B65D43/0274 B65D2101/0092 B65D2543/00092 B65D2543/00296 B65D2543/00425 B65D2543/00509 B65D2543/00527 B65D2543/00537 B65D2543/00546 B65D2543/00555 B65D2543/0062 B65D2543/00685 B65D2543/00731 B65D2543/00796
European class:	B65D43/02T3D B65D43/02T5B B65D43/02T5E L65D101/00A7 L65D543/00Y1F2C L65D543/00Y1M6 L65D543/00Y4 L65D543/00Y8D1C L65D543/00Y8D1N L65D543/00Y8D3 L65D543/00Y8D3N L65D543/00Y8D5 L65D543/00Y8S1B2 L65D543/00Y8S1D2 L65D543/00Y8S3B2 L65D543/00Y8S3D2
US class:	220/276
Classification Explorer	
Cited documents:	US541606 A, US460246 A, US2751102 A, US2695645 A, US2462988 A, US2410928 A, US2285220 A, US2252779 A, US2232783 A, US2110012 A, GB231487 A, FR659382 A, FR388133 A,
Forward Citations:	WO9935045, WO9520529, WO8501030, WO16198843, WO0181186, US8584887, US8281980, US6193094, US6135304, US5709314, US5429833, US5114068, US5042680, US4781304, US4759463, US4434907, US4433793, US4027775, US3595428, US3572579, US3515334, US3495759, US3483964, US3391849, US3351265, US3349989, US3256975, US3042242, US2012103991, US2008308557, US2007181659, US2005133508, US2002142738, GB2316678, GB2236099, FR2707951, FR2517636, FR2514731, FR2478031, EP0656300, EP0631941, EP0461691, EP0174688, EP0132897, DE4432296, DE4410206, DE3244459,

Abstract:
Source: US2998158A (Claim 1) In a heat **sealable** **package** of resilient locally deformable thermoplastic material including polyethylene, styrenes and vinyls and consisting of a **container** and an engaging **cover** therefor, an outwardly and downwardly folded **container** edge terminating in an outwardly extending flange and an engaging outwardly and downwardly folded **cover** edge also terminating in an outwardly 50 extending flange adapted to superpose and engage the first mentioned flange, said flanges on the engaging faces and adjacent the free edges having a peripheral and permanently fused -area, said flanges on the non-engaging faces and inwardly of the fused area being provided with 55 aligned and peripheral scoring lines, means on the flanges to initiate severance of the fused and outer portions of the flanges along said scoring lines for removal of the said portions of the flanges whereby the **cover** and **container** may be reused as a frictionally engageable, **seal**-00 tight and removable **cover** for the **container**.



98) Family number: 20866300 (GB910328A)

Title:	Liquid-carrying **containers**, particularly for use in photography
Priority:	FR19610853831 19610224 FR19610853832 19610224 US19600013949 19600309

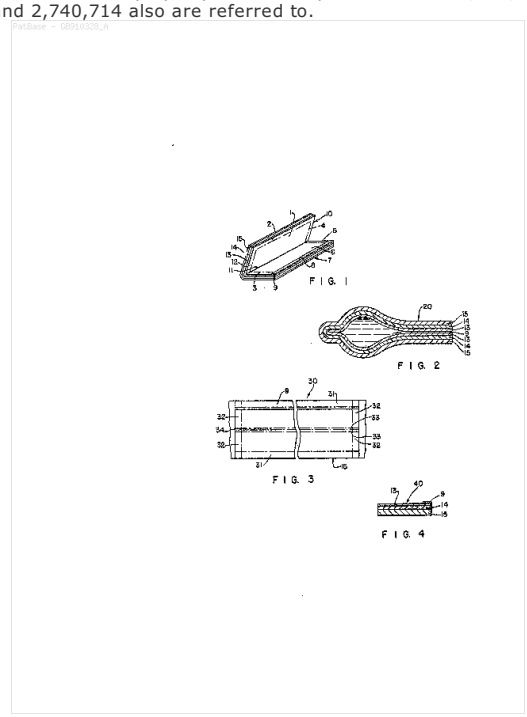
Family:

Publication number	Publication date	Application number	Application date
BE601118 A4	19610911	BE19610601118	19610309
BE601118 R	19610911	BE19610601118	19610309
BE601119 A4	19610911	BE19610601119	19610309
BE601119 R	19610911	BE19610601119	19610309
FR79956 E	19630222	FR19610853831	19610224
FR79957 E	19630222	FR19610853832	19610224
GB910328 A	19621114	GB19610008292	19610307
GB910329 A	19621114	GB19610008293	19610307

Probable Assignee:	POLAROID CORP
Assignee(s):(std):	POLAROID CORP
Assignee(s):	INT POLAROID CORP
Inventor(s):(std):	CAMPBELL J E ; CAMPBELL JOHN EDWARD
Inventor(s):	J E CAMPBELL ; JE CAMPBELL ; JOHN EDWARD CAMPBELL
International class (IPC 8-9):	G03C8/34 (Advanced/Invention); G03C8/32 (Core/Invention)
International class (IPC 1-7):	B65D37/00 G03C
CPC:	G03C8/34
European class:	G03C8/34

Classification Explorer

Abstract:
Source: GB910328A 910,328. Photographic film **units**. INTERNATIONAL POLARIOD CORPORATION. March 7, 1961 [March 9, 1960], No. 8292/61. Addition to 891,350. Drawings to Specification. Class 98 (2). [Also in Groups VIII and XVII] In a photographic processing **unit** similar to that of Specification 873,896, the **container** with a weakened seam containing the processing liquid is modified by forming the inner layer of the laminated wall thereof of polyvinyl fluoride. Specifications 706,901, 751,304,753,250,804,971, 809,399 and U.S.A. Specifications 2,687,478 and 2,740,714 also are referred to.



99) Family number: 25046036 (GB972231A)

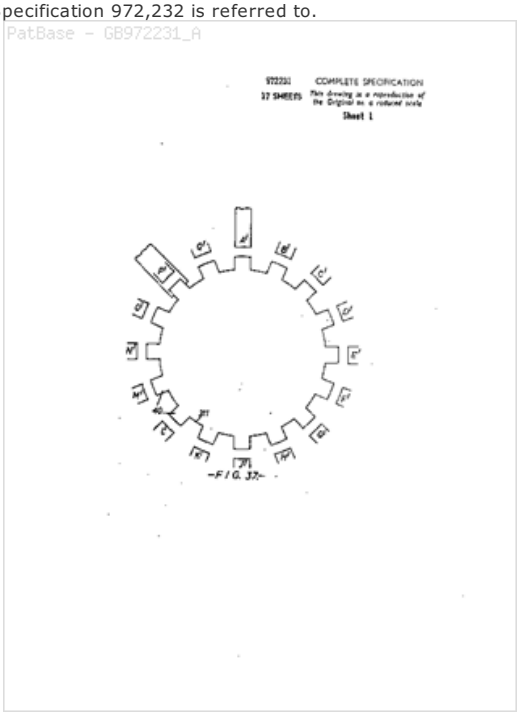
Title:	Improvements in or relating to machines for making, filling and **sealing** **bags** and likecontainers
Priority:	GB19600020981 19600615

Family:

Publication number	Publication date	Application number	Application date
BE605023 A	19611002	BE19610605023	19610615
CH407856 A	19660215	CH19610006912	19610613
GB972231 A	19641007	GB19600020981	19600615

Probable Assignee:	R W BARRACLOUGH LTD
Assignee(s):(std):	BARRACLOUGH RONALD WILLIAM ; R W BARRACLOUGH LIMITED ; R W BARRACLOUGH LTD ; RONALD WILLIAM BARRACLOUGH
Assignee(s):	RW BARRACLOUGH LTD
Inventor(s):(std):	RONALD WILLIAM BARRACLOUGH
Inventor(s):	WILLIAM BARRACLOUGH RONALD
International class (IPC 8-9):	B65B1/02 B65B3/02 (Advanced/Invention); B65B1/00 B65B3/00 (Core/Invention)
International class (IPC 1-7):	B31B B65B1/02 B65B3/02
CPC:	B65B1/02 B65B3/02
European class:	B65B1/02 B65B3/02
Classification Explorer	
Forward Citations:	NL7701517, JP58140230, JP56067246, JP55150320, JP54159081,

Abstract:
Source: GB972231A 972,231. **Bags**, making; seaming non-metallic sheet material. R. W. BARRACLOUGH Ltd. June 5, 1961 [June 15, 1960], No. 20891/60. Headings B5D and B5K. [Also in Divisions B6 and B8] A machine for forming block bottom **bags** from lengths of gusseted tubing 11a of semirigid material comprises means (Fig. 15) for closing an end of the tube length and means for inflating the **bag** so formed and for forming a block bottom thereon. The machines disclosed produce such a **bag**; provide a weakened **opening** portion therein **covered** by a **label**; fill the **bag** and finally **seal** its upper edges. The machine of the first embodiment comprises a twelve point turret (Fig. 7) rotated intermittently through twelve working stations. The turret carries twelve **bag** supporting mechanisms comprising three jaw members 41, 42, 45 (Figs. 15) which can be separated by acting on a buttress 45g. A length of tubing 11 is cut and fed from a continuous roll (Fig. 12, not shown; see Division B6) to a gripper at station A which then moves to B where the tubing is siezed by members 81, 82 adjacent the bottom edges which are then heated by an electric radiator 93 to welding temperature. Members 81, 82 and the heater 93 then withdraw and clamps 101, 102 advance to **seal** the bottom edge of the **bag**; clamps 101, 102 are water cooled to set the **seal**. As the **bag** reaches station C the ungripped half of the **bag** is drawn away by a suction pad 111 (Fig. 17), an anvil 115b is inserted into the **open** mouth and a punch 118 strikes the side of the **bag** to produce a weakened disc portion. At station D a **label** 120a (Fig. 20) is heat **sealed** over the weakened portion, a part being left unsealed to act as an **opening** **tab** (see Division B8). At station E a second suction pad 140 **opens** the **bag** and a nozzle is inserted (Figs. 21-24, not shown), the pad 140 then closing the **bag** and gripping the nozzle between its walls. High pressure air, nitrogen c. issues from the nozzle to inflate the **bag**, a supporting platform rising to assist in producing a flat bottom. The remaining stations of the turret are concerned with the filling and closing of the final **package** (see Division B8). A second machine, having a number of extra turret positions, differs from the first in providing a number of stages of preheating prior to **sealing** the bottom of the **bag**. Specification 972,232 is referred to.



100) Family number: 30960863 (US3457549A)

© PatBase

Title: METHODS FOR LAYING OUT AUTOMATION

Priority: GB19560031087 19561012

Family:

Publication number	Publication date	Application number	Application date
DK118925 B	19701019	DK19570003404	19571005
GB878902 A	19611004	GB19560031087	19561012
NL6406438 A	19641012	NL19640006438	19640605
US3321744 A	19670523	US19620180159	19620316
US3457549 A	19690722	US19620180117	19620316

Probable Assignee: HERMAN BA AND RGE FUNCK JENSEN

Assignee(s):(std)**:** FUNCK JENSEN HERMANN BORGE ; HERMAN BA AND RGE FUNCK JENSEN ; HERMANN BORGE FUNCK JENSEN ; JENSEN B

Assignee(s): BOERGE HERMANN FUNCK JENSEN

Inventor(s):(std)**:** JENSEN B ; JENSEN HERMANN BORGE FUNCK ; FUNCK JENSEN HERMANN BORGE

Inventor(s): BOERGE HERMANN FUNCK JENSEN ; HERMANN BORGE FUNCK JENSEN

International class (IPC 8-9): B23Q15/00 G05B19/04 G05B19/08 (Advanced/Invention); B23Q15/00 G05B19/04 (Core/Invention)

International class (IPC 1-7): G05B19/26 H04Q3/02

CPC: B23Q15/00 G05B19/0405 G05B19/08 G05B2219/34205 G05B2219/34365 G05B2219/45129

European class: B23Q15/00 G05B19/04D G05B19/08 S05B219/34205 S05B219/34365 S05B219/45129

US class: 318/162 318/569 340/147 340/4.36 340/825.22 340/825.23

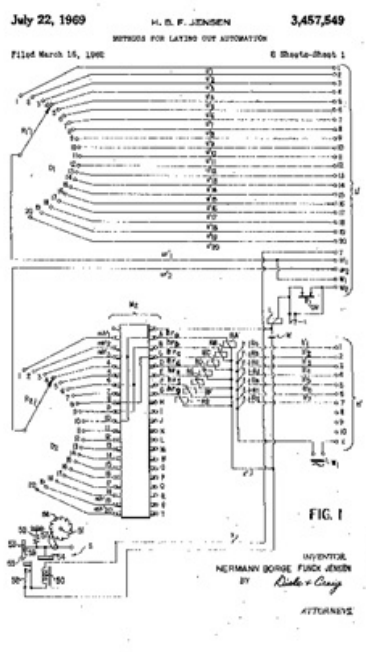
Classification Explorer

Cited documents: US2927258 A, US2898483 A, US2838963 A, US2764821 A, US2535767 A, US2384809 A, US2029335 A, US1286232 A, DE893742 A, DE738284 A,

Forward Citations: US7365452, US6467605, US6076652, US6039168, US4195773, US3758835, US3668498, US3541512, US2017047714, US2004083834, FR2535143, FR2158391, FR2158391, DE3042205,

Abstract:
Source: GB878902A 878,902. Switching systems. JENSEN, H. B. F. Oct. 9, 1957 [Oct. 12, 1956], No. 31087/56. Class 38 (4). [Also in Group XXII] A control **unit** as shown in Figs. 2 and 4 includes two stepping switches each of which is connected to a multi-terminal plug u and h, the switches of each group being included respectively in a plurality of check or conditionsensing circuits and in a plurality of control circuits. An actuator S advances the fingers R1, R2 of the switches simultaneously. The condition-sensing circuits contain switches U1- U5 located in a machine to indicate the completion of various operations, the switches being connected to a multi-terminal plug u<SP>1</SP>. The control circuits include electrically-controlled members H1-H3 which may be pneumatic or hydraulic means actuated by solenoid valves, the members being connected to a multiterminal plug h<SP>1</SP>. In a particular instance, the switch U1, may be a manual starting switch, the member H1 may be a work clamp with correct clamping indicated by the switch U2 or a valve in a chemical plant with full **opening** or closing indicated by the switch U2. The switch U3 may indicate when a certain temperature has been reached or a particular fluid flow has occurred. The member H2 may be for working on the workpiece or for controlling heating of the fluid. The member H3 may remove the workpiece or **open** a valve. In a modification, several selector switches may be connected in series or an assembly line may be controlled by two control **units** in parallel. In a drilling- machine, a magazine 102, Fig. 7, contains striking plates for locks, the plates having two holes to be counter-sunk. The plates are fed by a fluid-pressure device H 2 which can be stopped in two positions by a stop 112 and a stop 114 movable by means H 1. Each plate is clamped in two positions successively by clamps 116, 118 for counter-sinking the holes by the single drill 106. A control member H6 moves a finger 120 to check correct drilling of every other hole. If a hole has not been countersunk or is not deep enough, the gauge 120 causes a switch u14 to actuate a solenoid H 7 to advance a ratchet 134 thus turning a screw 136 and adjusting the position of the lower limit of the drill-moving arm 140. A gauge may also be fitted to check if a hole is too deep. Initially, a feeler 124 checks that there are workpieces in the feed-channel. Checks are also made to ensure that the drill reaches its upper and lower positions, that the stops are correctly positioned and that the workpiece is clamped. A programme chart may be prepared to assist in wiring the plugs connecting the machine with the control **unit**. A feeler 103 may indicate when the magazine 102 has emptied to cause a signal to be sent to a second control **unit** which rotates a table and brings a full magazine into position and may also refill the empty magazine. Alternatively, a regular check could be made in the number of workpieces in the magazine, such a check being made after a certain number of drilling operations. A device 105 measures the time taken to countersink a hole. If the time is too long, due to a blunt drill, a switch u<SP>1</SP>5 is **opened** to raise the drill, shut-off the drill-motor, clamp the drill spindle, position a tray beneath the drill and rotate the chuck to drop the drill, the falling drill closing a switch to move away the drill. Furthermore, a magazine arm is moved to supply a new drill which is inserted and clamped, and the machine is then re-started with the control **unit** in its initial position. A test apparatus may be used to check correct setting- up, the apparatus consisting of a manuallyadvanceable switch and indicator lamps. In another application, a welding-machine is automatically controlled to rotate a table to bring a work-holder to the electrodes, to withdraw the electrodes when welding is complete and again to rotate the table. Additionally, the work-holder may be **opened** to allow a workpiece to be blown clear, there being a check to prevent incorrectly held workpieces from passing to the electrodes. A worn drill may be detected by measuring the temperature of the cutting fluid and causing a new drill to be supplied. A check may be in the form of photo-cells in a Wheatstone bridge. Specification 878,903 is referred to.

PatBase - US3457549_A



101) Family number: 31157253 (US3211419A)

Title: PISTON VALVE WITH SPRING PRESSED HEAD

Priority: AT19600001111 19600212 AT19620002315 19620321

Family:

Publication number	Publication date	Application number	Application date
AT217808 B	19611025	AT19600001111	19600212
AT229099 B	19630826	AT19620002315	19620321
AU2863563 A1	19640924	AU19630028635	19630321
CH381488 A	19640831	CH19600013550	19601202
CH388051 A	19650215	CH19630003018	19630311
DK104657 C	19660613	DK19600004962	19601214
DK113612 B	19690408	DK19630001272	19630320
GB915063 A	19630109	GB19610004570	19610207
GB971318 A	19640930	GB19630010823	19630319
US3211418 A	19651012	US19630265876	19630318
US3211419 A	19651012	US19610083325	19610117

Probable Assignee: RICH KLINGER AG

Assignee(s):(std)**:** ISTAG A G ; ISTAG AG ; RICH KLINGER AG

Assignee(s): RICH KLINGER AKTIENGESELLSCHAFT ; TATANA G

Inventor(s):(std)**:** KLINGER LOHR HUBERT DR ; KLINGER LOHR H ; HUBERT KLINGER LOHR

Inventor(s): KLINGER LOHR HUBERT ; DR HUBERT KLINGER LOHR

International class (IPC 8-9): F16K1/36 F16K1/38 F16K3/24 (Advanced/Invention); F16K1/32 F16K3/00 (Core/Invention)

International class (IPC 1-7): F06K F16K1/34 F16K25/00 F16K3/24

CPC: F16K1/385 Y10T137/86984 F16K3/243 F16K1/36

European class: F16K1/36 F16K1/38B F16K3/24D

US class: 137/630.15 251/176 251/186 251/187 251/191

Classification Explorer

Cited documents: US678994 A, US2772849 A, US2635846 A, US2200226 A, US2106736 A, US1991052 A, US1792945 A, US1686849 A, US1413764 A, US1371575 A, US1166638 A, US1111244 A, GB454546 A, DE1126689 B, CH134527 A, CH134527,

Forward Citations: WO8403924, WO14209572, WO11010195, WO09035864, WO09035864, WO03044406, WO02101271, WO02061315, US9777552, US9726406, US9677679, US9581249, US9395019, US9194501, US8596301, US7530365, US7174909, US7128080, US6957661, US6910504, US6901962, US6776392, US6745794, US6691982, US6622743, US6565065, US6491056, US6289932, US5718410, US5687709, US5499648, US5150729, US5083750, US5029516, US5004209, US4939981, US4916900, US4856279, US4815698, US4672203, US4531545, US4421298, US4274433, US4248403, US4089504, US4073308, US3804365, US3794295, US3623508, US3612479, US3603344, US3314372, US2017097103, US2015001431, US2013206851, US2010078084, US2009065073, US2007227601, US2006180217, US2005189022, US2003226603, US2003121555, US2002056479, NL7407994, JP5008238, JP3869414, JP2004522110, JP2003506650, GC3839, FR2440504, EP2278199, EP1436535, EP1354159, EP1182386, DE3513297, DE2428242, DE1267046, CN104006168, CN104006168, CN102927300,

Abstract:

Source: GB915063A 915,063. Valves. ISTAG A.G. Feb. 7, 1961 [Feb. 12, 1960], No. 4570/61. Class 135. A fluid-flow control valve comprises a **sealing** ring **closure** member 2 carried by a part 1 on a two-part piston member 1, 11, the other part 11 being loosely mounted on a spindle 5 and loaded by a spring 10 into engagement with the **sealing** ring. The part 1 is allowed limited axial movement relative to the spindle such movement being determined by a collar 7 on the spindle. To close then valve the piston is moved by actuation of the spindle as a **unit** until the part 1 is arrested by an abutment 15 on the housing after which, further movement of the spindle acts through the spring to move the upper part 11 relative to the lower part, thus causing compression of the ring 2 to **seal** relatively to the housing. The abutment 15 may co-operate with a surface 14 on the part 1 to form an additional valve and a further pilot valve may be provided by a **closure** member 19 on the spindle co-operating with a seat 18 on the piston. The spring 10 abuts a nut 6 mounted on the spindle and the spring loading may be adjusted by withdrawal of the spindle until the nut abuts a projection 25 and is held against rotation. Rotation of the spindle then adjusts the spring loading. In operation, the spindle is held against rotation.

PatBase - US3211418_A

Oct. 12, 1965 H. KLINGER LOHR 3,211,418
SHUT-OFF VALVE
Filed March 15, 1963

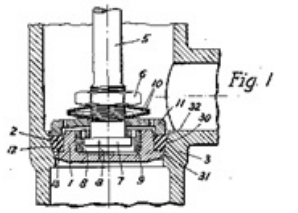


Fig. 1

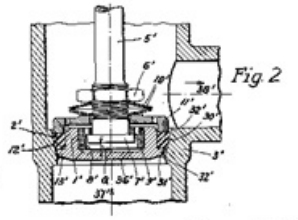


Fig. 2

Hubert Klinger Lohr
INVENTOR
by Michael S. Striker
ATTORNEY

102) Family number: 20800434 (GB880956A)

© PatBase

Title:	Improved **package** for cigarettes
Priority:	GB19580008449 19580317

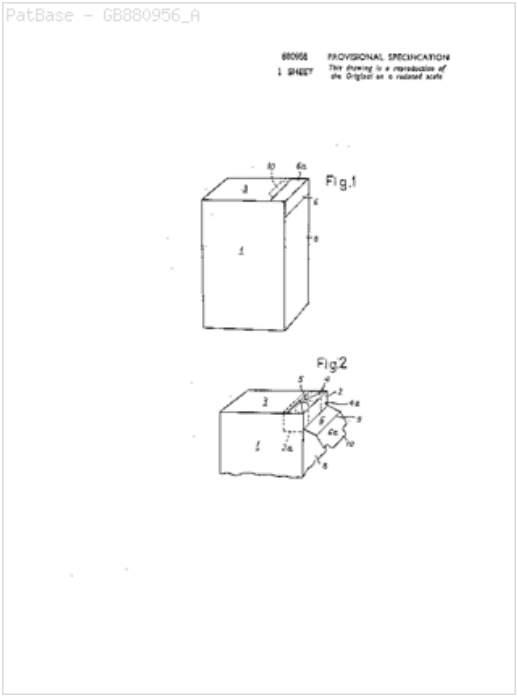
Family:

Publication number	Publication date	Application number	Application date
GB880956 A	19611025	GB19580008449	19580317

Probable Assignee:	HYMAN POLICANSKY
Assignee(s):(std)**:**	HYMAN POLICANSKY
International class (IPC 8-9):	B65D5/70 (Advanced/Invention); B65D5/70 (Core/Invention)
International class (IPC 1-7):	B65D85/10
CPC:	B65D5/705
European class:	B65D5/70C
Classification Explorer	
Forward Citations:	WO9811003, US6276522, EP0925238,

Abstract:

Source: GB880956A 880,956. Cigerette **packages**. POLICANSKY, H. Feb. 20, 1959 [March 17, 1958; June 17, 1958], Nos. 8449/58 and 19350/58. Classes 18 and 94(1). An **opening** for the removal of cigarettes from a carton is provided at the end 4 of the top well 3 of the carton and extends 4a on to the adjacent side wall 8, a flap 6, 6a closes the **opening** and its end tucks under the top wall 3. The carton, comprises a single blank, Fig. 3, and has a **tab** 15 which is secured to the wall 14. The blank is cut at 17 to form the part 6 of the closing flap. The cigarettes are wrapped in a paper backed metal foil folded to form a **tab** 5 which facilitates **opening**. The paper backed foil is perforated or weakened at 2a so that it can be easily torn away. The carton can have a moisture proof outer wrapping. Both the outer and inner wrappings can have a tear string or tape. The sides 8, 8a can be reinforced by a second thickness of cardboard on the inside, the additional piece on panel 8 forming an abutment 19 for the closing flap. A revenue **stamp** can be stuck across the flap 6.



103) Family number: 22563459 (US3007016A)

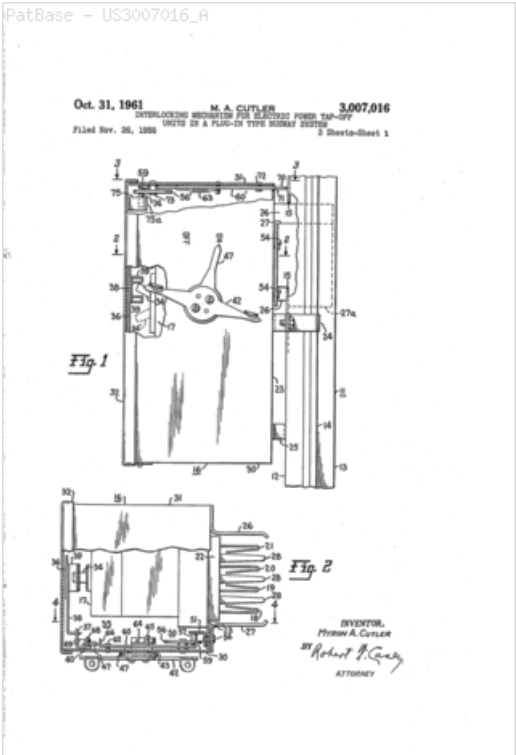
Title:	INTERLOCKING MECHANISM FOR ELECTRIC POWER TAP-OFF **UNITS** IN A PLUG-IN TYPE BUSWAY SYSTEM
Priority:	US19580776555 19581126

Family:

Publication number	Publication date	Application number	Application date
US3007016 A	19611031	US19580776555	19581126

Probable Assignee:	GEN ELECTRIC
Assignee(s):(std):	GEN ELECTRIC
Assignee(s):	GENERAL ELECTRIC CO ; GENERAL ELECTRIC COMPANY
Inventor(s):(std):	CUTLER MYRON A
International class (IPC 8-9):	H02G5/08 (Advanced/Invention); H02G5/00 (Core/Invention)
International class (IPC 1-7):	H01R25/16
CPC:	Y10S439/911 H02G5/08
European class:	H02G5/08
US class:	200/293 200/50.21 200/50.24 439/911
Classification Explorer	
Cited documents:	US2984769 A, US2938096 A, US2888529 A, US2550125 A, US2256910 A, US1821224 A,
Forward Citations:	FR2158120,

Abstract:
Source: US3007016A (Claim 1) 1. In an electric power distribution system; a relative-ly stationary **unit** housing a source of electric power; a removable **unit** housing a power tap-ofi device disposed for mounting and dismounting with respect to the rela-tively stationary **unit**; a pair of cooperating disconnect contacts associated with the stationary and removable **units**, respectively, for establishing electrical connection between the tap-ofi device and the source of power when the removable **unit** is mounted on the stationary **unit**; a relatively movable interlock element supported by the removable **unit** for movement between an active position and an inactive position, a rigid stop portion of the interlock element reciprocally movable along a linear path between first and second predetermined positions corre-sponding respectively to said inactive and active positions, said interlock element including means disposed in coopération with the stationary **unit** to prevent mounting or dismounting of the removable **unit** when in said active position and to permit mounting and dismounting of the removable **unit** when in said inactive position; a bell crank having two arms pivotally supported by the removable **unit** for movement between first and second angular positions, one arm of the bell crank being coupled to the interlock element for moving the interlock element from its inactive to its active position in response to movement of the bell crank from its first to its second angular position; actuating means for moving the bell crank; and a cooperating element movably supported by the removable 6 **unit** and coupled to the other arm of the bell crank, said cooperating element having a blocking portion responsive to movement of the bell crank from its first to its second angular position for rectilinear movement along a predetermined path, oriented generally perpendicular to the 10 linear path of said portion, into interfering relationship with said stop portion to prevent movement of said stop portion toward its first position thereby positively blocking the interlock element in its active position until the blocking portion is moved to a non-interfering position 15 by opération of the actuating means.



104) Family number: 22680729 (US3007376A)

Title:	METHOD OF JOINING PAPERBOARD ELEMENTS USING MORE THAN ONE KIND OF ADHESIVE AND CARTON **SEALED** BY SUCH METHOD
Priority:	US19580752021 19580730 US19610083310 19610117

Family:

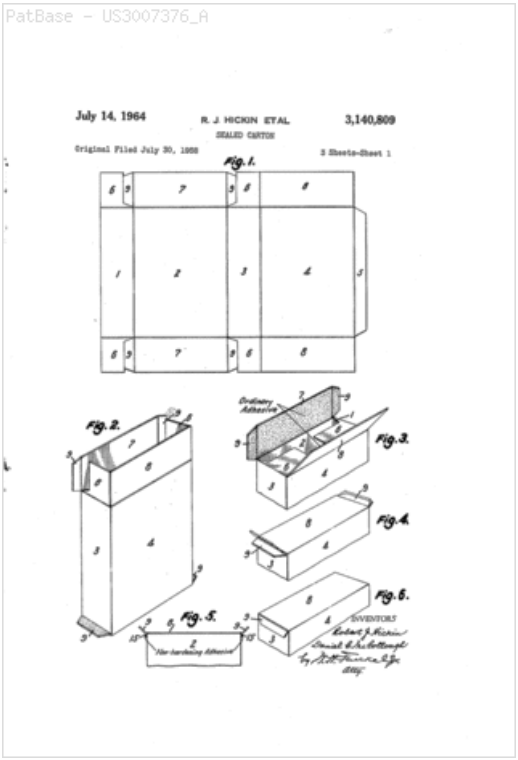
Publication number	Publication date	Application number	Application date
US3007376 A	19611107	US19580752021	19580730
US3140809 A	19640714	US19610083310	19610117

Probable Assignee:	PACKAGING CORP AMERICA
Assignee(s):(std):	PACKAGING CORP AMERICA
Assignee(s):	PACKAGING OF AMERICA CORP
Inventor(s):(std):	HICKIN ROBERT J ; MCCOLLOUGH DANIEL C
International class (IPC 8-9):	B31B1/62 B31B5/74 B65D5/02 (Advanced/Invention); B31B1/60 B31B5/00 B65D5/02 (Core/Invention)
International class (IPC 1-7):	B31B3/60 B65D5/26
CPC:	B65D5/0227 B31B50/0044 B31B50/60 B31B50/784 B31B2100/00 B31B2120/30
European class:	B31B1/60 B31B1/62 B65D5/02C L31B201/28A2 L31B201/29B L31B201/60 L31B203/00A
US class:	156/315 229/132 229/136 229/154 229/5.85 493/128 493/183

Classification Explorer

Cited documents:	US2783692 A, US2772610 A, US2754044 A, US2523488 A, US2501852 A, US2439435 A, US2437114 A, US2412031 A, US2341845 A, US2340473 A, US1974256 A, US1863260 A,
Forward Citations:	US9296509, US7861917, US7314159, US7055734, US6871778, US6866189, US6863212, US6860400, US6059182, US6059178, US5911359, US5875963, US5762263, US5743462, US5673849, US5505374, US5373960, US5261595, US5161734, US4854929, US4836440, US4159076, US3985287, US3979046, US3958746, US3941303, US3482489, US3455496, US3411701, US3377767, US3361335, US3357629, US3348757, US3297229, US3249282, US3198416, US3166231, US3135454, US3135453, US3110433, US2008067224, US2008063740, US2006043161, US2004195301, US2004195299, US2004178252, EP0245581, EP0245581, EP0245581, DE1217842,

Abstract:
Source: US3007376A (Claim 1) 1. The method of **sealing** a paperboard carton having angularly disposed side walls and **closure** flaps foldably connected to said side walls and adapted, when in folded relation, to form an end wall angularly disposed to said side walls; said method cornprising applying to mating surfaces of predetermined flaps a permanently setting adhesive to effect retention of said flaps in end wall-forming relation, and applying a plastic **sealing** ma- terial to marginal portions of said predetermined flaps, each marginal portion to which such **sealing** material is applied formin- a part of the end wall periphery which extends from the line of fold of one predeterniined flap to the line of fold of a second predetermined flap, the plastic **sealing** material having the property of retaining its plasticity in the presence of all atmospheric conditions to wbich the **sealed** carton may normally be subjected; the plastic **sealing** material, in the presence of applied pressure and the coaction of the **closure** flaps and side walls, being caused to flow relative to the predetermined flap marginal port-ions and conipletely fili any voids formed at the juncture of the carton end wall and side waffs.



105) Family number: 29846038 (US3054680A)

Title: CONTAINER COVER

Priority: FR19610851982 19610207 US19600008553 19600215

Family:

Publication number	Publication date	Application number	Application date
CH383805 A	19641031	CH19610001260	19610202
DE1168824 B	19640423	DE1961M047885	19610201
FR1279093 A	19611215	FR19610851982	19610207
GB917992 A	19630213	GB19610005391	19610214
NL128148 C	00000000		00000000
NL261194 A	00000000		00000000
NL6907599 A	19690725	NL19690007599	19690519
US3054680 A	19620918	US19600008553	19600215

Probable Assignee: AMERICAN HOME PROD

Assignee(s):(std)**:** AMERICAN HOME PROD ; FREDERICK CARL MENNEN

Assignee(s): AMERICAN HOME PRODUCTS CORP

Inventor(s):(std)**:** MENNEN FREDERICK C ; MENNEN FREDERICK CARL ; FREDERICK CARL MENNEN

Inventor(s): CARL MENNEN FREDERICK

International class (IPC 8-9): A47J36/06 B65D17/40 B65D17/50 B65D77/20 B65D8/02 B65D81/34 (Advanced/Invention); A47J36/00 B65D17/00 B65D17/28 B65D77/10 B65D8/00 B65D81/34 (Core/Invention)

International class (IPC 1-7): B65D17/20 B65D77/38

CPC: Y10S229/925 B65D17/28 B65D17/4011 B65D17/404 B65D17/462 B65D77/2008 B65D81/343 B65D2577/2091

European class: B65D17/16 B65D17/16B1 B65D17/20 B65D17/24 B65D77/20B1 B65D81/34C L65D577/20P2

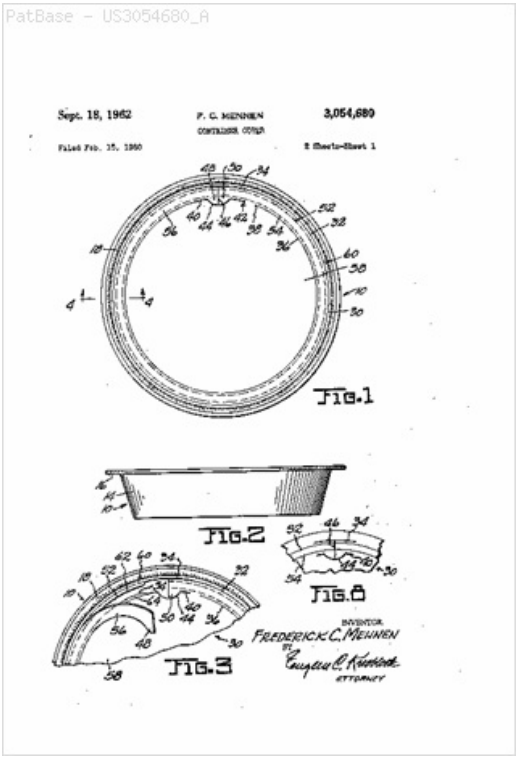
US class: 229/123.2 229/207 229/925 426/111 426/113 426/123

Classification Explorer

Cited documents: US2909312 A, US2815883 A, US2791350 A, US2759656 A, US2747784 A, US2673806 A, US2626096 A, US2608341 A, US2401417 A, US2308050 A, US1773553 A, GB254039 A, FR1175809 A, DE1005447 B, CH87330 A, CH151921 A, CH146145 A, BE553753 A,

Forward Citations: WO8700149, USD703547, USD671012, US9079704, US8735786, US8729437, US8610039, US5516035, US5190777, US4802619, US4708249, US4664263, US4640838, US4584202, US4386706, US4350250, US4292332, US4244473, US4194681, US3969535, US3873738, US3399820, US3286909, US3244356, US3186621, US3185578, US3183800, US3158491, US3144194, US2006263494, US2005150891, US2004241292, GB2174061, GB2174061, GB2123786, FR2713200, FR2585677, FR2559740, EP1382544, EP0424649, DE2750460,

Abstract:
Source: GB917992A 917,992. Containers; packaging popcorn. MENNEN, F. C. Feb. 14, 1961 [Feb. 15, 1960], No. 5391/61. Classes 66 and 94(1). A cover which may be peripherally sealed to a container has at least one score in each of its faces enabling a central portion of the cover to be removed by tearing in its plane between the scores without destroying the peripheral seal, there being finger grip means positoned adjacent said scores. An aluminium foil container for packaging and cooking foods comprises a tray portion 10 and a wrinkled sheet of thin aluminium foil 20 sealed to the tray and adapted to stretch to allow for expansion of the contents during cooking. The sheet 20 is protected by a paperboard cover 30 peripherally sealed to the container by crimping 18 and having scores 32, 36 in its upper surface and 52, 54 in its lower surface; cuts 34, 40, 46 define a pair of tabs 48, 50. To remove the central portion 58 of the cover the tab 48 is grasped and pulled upwards to tear away a strip 56. A gap in the score 36 at 38 ensures that the strip 56 and portion 58 remain secured together and are removed as a single unit. In a modification, Fig. 5 (not shown) only a single score is made in each face of the cover. U.S.A. Specifications 2,791,350 and 2,815,833 are referred to.



106) Family number: 23032742 (US3029997A)

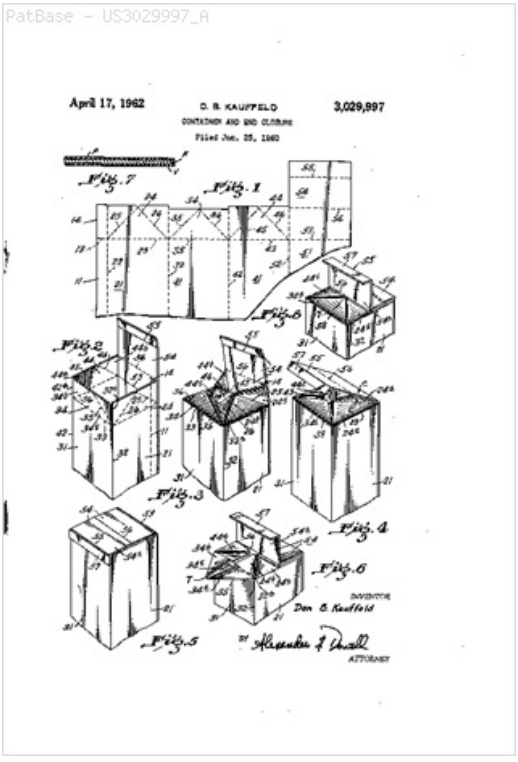
Title:	**CONTAINER** AND END **CLOSURE**
Priority:	US19600004267 19600125

Family:

Publication number	Publication date	Application number	Application date
CH368415 A	19630331	CH19610000883	19610123
FR1278952 A	19611215	FR19610041147	19610124
GB928610 A	19630612	GB19610002061	19610119
NL260359 A	19640427	NL19610260359	19610123
US3029997 A	19620417	US19600004267	19600125

Probable Assignee:	FOILS PACKAGING CORP
Assignee(s):(std)**:**	FOILS PACKAGING CORP
Inventor(s):(std)**:**	DON B KAUFFELD ; KAUFFELD DON B
Inventor(s):	B KAUFFELD DON
International class (IPC 8-9):	B65D5/06 B65D5/56 B65D65/40 (Advanced/Invention); B65D5/02 B65D5/56 B65D65/40 (Core/Invention)
International class (IPC 1-7):	B65D5/26
CPC:	B65D5/062 B65D5/061 B65D5/563 B65D65/40
European class:	B65D5/06B B65D5/06B1 B65D5/56B B65D65/40
US class:	229/131 229/137 229/138 229/141 229/245 229/5.84
Classification Explorer	
Cited documents:	US2461251 A, US2433994 A, US2361876 A, US2033855 A, US1752705 A, FR1042666 A, BE510369 A,
Forward Citations:	US5286538, US4768703, US4706874, US4493453, US4279375, US3529763, US3474951, US3434651, US3406892, US3229891, US3217967, US3193175, US3176904, US3118586, US3116869, US2012206155, US2010021993, DE2302484,

Abstract:
Source: GB928610A 928,610. Cartons and blanks therefor. FOILS **PACKAGING** CORPORATION. Jan. 18, 1961 [Jan. 25, 1960], No. 2061/61. Class 18. A blank for a tubular carton has three end **closure** flaps 24, 34, 44, of half the width of the adjacent side panels of the carton, each provided with diagonal creases such as 25, 26, and a fourth flap 54 adapted to **cover** the whole top of the carton. The blank is preferably of plastic-coated cardboard and the end flaps 24, 34, 44, are folded inwards and folded at the crease lines 25, 26 and c. to form triangular flaps 24c, 34c, 44c, Fig. 4, with triangular gussets 32a therebetween. The end flap 54 is then folded in over the triangular flaps and is first heat **sealed** to the attached triangular flap portions 24a, by heat and pressure at C, and is then fastened down by a **tab** 57 and heat **sealed** to the tops of the triangular flaps 24c, 34c, 44c. The flap 54 is arranged so that on **opening** of the carton the part 54a, Fig. 6, hinges about a crease line 56 to expose flap 34c which, when pulled outwards, forms a pouring spout T.



107) Family number: 23765831 (US3233384A)

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Title: METHOD OF **PACKAGING** A PARENTERAL FLUID

Priority: US19600062585 19601014 US19630261926 19630201 US19640365550 19640420 US19640365551 19640420

Family:

Publication number	Publication date	Application number	Application date
DE1844725 U	19620111	DE1961B046627U	19610927
US3161310 A	19641215	US19600062585	19601014
US3193993 A	19650713	US19630261926	19630201
US3208710 A	19650928	US19640365550	19640420
US3233384 A	19660208	US19640365551	19640420

Probable Assignee: BAXTER DON INC

Assignee(s):(std)**:** BAXTER DON INC ; DON BAXTER INC

Inventor(s):(std)**:** BARTON RAYMOND W ; HERMANN HECKEL ; PAUL PRICKETT ; SWENSON EDWARD G

Inventor(s): PRICKETT PAUL ; HECKEL HERMANN

International class (IPC 8-9): A61J1/00 A61J1/05 A61M5/162 (Advanced/Invention); A61J1/00 A61J1/05 A61M5/14 (Core/Invention)

International class (IPC 1-7): A61J1/06 A61M5/16

CPC: A61M5/162 A61M2005/1623 Y10S215/901 A61J1/05 A61J2200/76

European class: A61J1/00T A61J1/05 A61M5/162 K61J200/76 K61M5/162A2

US class: 206/438 215/399 215/901 220/606 248/682 53/410 53/425 53/440 53/469 55/385.1 55/417 55/527 604/403 604/405 604/415 D24/117 D24/129

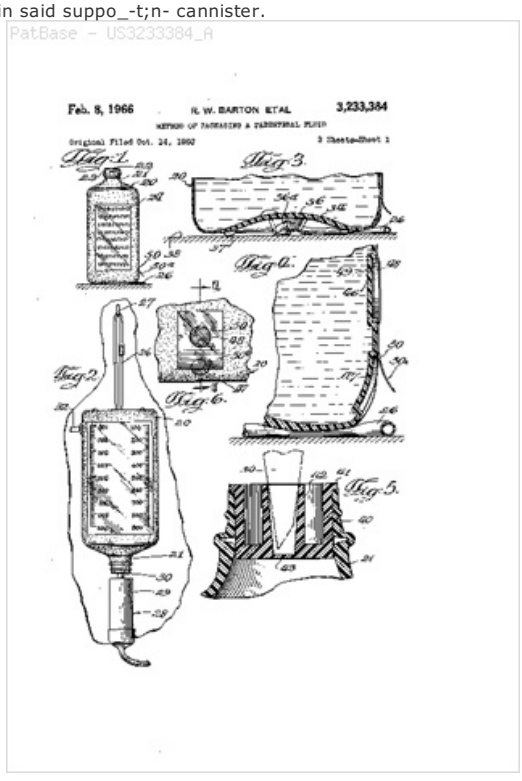
Classification Explorer

Cited documents: US82028 A, US3064652 A, US3048958 A, US3041775 A, US2999387 A, US2996177 A, US2983639 A, US2936920 A, US2906423 A, US2886035 A, US2852024 A, US2845728 A, US2837245 A, US2835623 A, US2835521 A, US2817372 A, US2816837 A, US2808829 A, US2787268 A, US2750769 A, US2739829 A, US2704075 A, US2699103 A, US2676428 A, US2660513 A, US2638430 A, US2635604 A, US2629148 A, US2614027 A, US2581331 A, US2559284 A, US2520124 A, US2507684 A, US2438149 A, US2380696 A, US2362980 A, US2294574 A, US2194168 A, US2138936 A, US2128652 A, US2100610 A, US2099484 A, US2065012 A, US1206354 A, GB190566 A, DE966701 A,

Forward Citations: WO9606011, WO9606011, WO05120433, US9883986, US8821472, US7980243, US7793655, US7550185, US7329445, US7213593, US7090093, US6869653, US6652942, US5833088, US5403538, US4832965, US4301935, US4259187, US4227527, US3880311, US3593909, US3527029, US3484013, US3343541, US3319684, US3316908, US2016167837, US2014126843, US2012097566, US2009036844, US2008033391, US2007066955, US2007016159, US2005241634, US2004182867, US2004129598, EP2712602, EP2712602, EP1867572, EP0775076, EP0440043,

Abstract:

Source: US3233384A (Claim 1) 1. Ti-ie method of **packaging** a liquid in a **container** of plastic materip.1 comprising: (a) insert-in.- the **container** into a supporting cannister with a neck of th- **container** exposed for filling; (b) filling the co_itainer w-ith l_'_qtiid at temperatures from 140' F. to 190- F.; (c) closing off the **container** neck with substantially all gases removed from the **container**; and (d) hea',ing the **container** and liquid contents to temperatures above 220' F. to heat sterilize, said filled **container** retaining its general size and shape without forcibly wed.aing in said suppo_-t;n- cannister.



108) Family number: 20818623 (GB887215A)

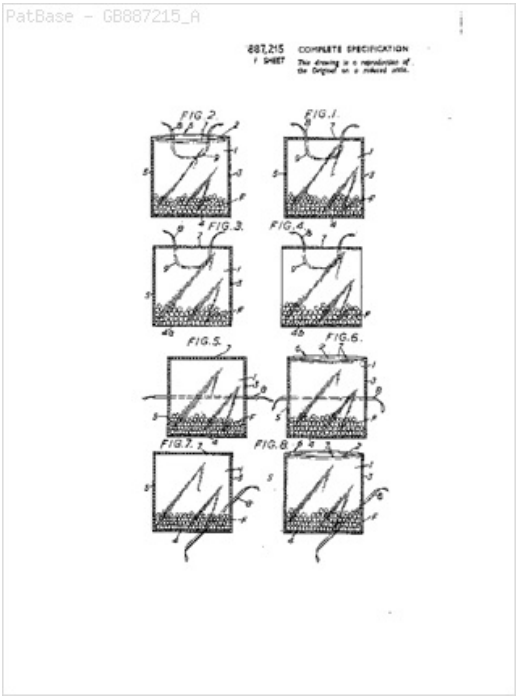
Title:	Improvements in or relating to **bags**
Priority:	GB19590010447 19590325

Family:

Publication number	Publication date	Application number	Application date
GB887215 A	19620117	GB19590010447	19590325

Probable Assignee:	METAL BOX CO LTD
Assignee(s):(std)**:**	METAL BOX CO LTD
Assignee(s):	THE METAL BOX COMPANY LIMITED
Inventor(s):(std)**:**	GALLANT TERENCE CHARLES
International class (IPC 8-9):	B65D81/34 (Advanced/Invention); B65D81/34 (Core/Invention)
International class (IPC 1-7):	B65D33/00
CPC:	B65D81/3415
European class:	B65D81/34B
Classification Explorer	
Forward Citations:	US3395025,

Abstract:
Source: GB887215A 887,215. **Bags**; food **packaging**. METAL **BOX** CO. Ltd. Jan. 4, 1960 [March 25, 1959], No. 10447/59. Drawings to Specification. Classes 94(1) and 94(2). A **bag** is made of heat-**sealable**, impervious material, e.g. plastic or a laminate of plastic and other material, by **sealing** together the edges of separate sheets, or the free edges of tubes or folded sheets, and including a thread which extends through at least two heatsealings, part being located in the **bag**, the material of the thread being such as not to fuse with the **bag** material. Vents are there formed which prevent the **bag** from rupturing when, containing food, it is boiled, the **bag** being suspended by the thread with the vents above the level of the boiling water. The thread may be string, nylon, or woven tape and may be impregnated, where appropriate, with a food compatible substance such as a micro-crystalline wax. The thread serves to facilitate **opening** the **bag** and may be used to tie the **bag** to the handle of a saucepan. When the thread is wax-impregnated the vents are **sealed** by wax during **storage** but **opened** by melting of the wax in the vents during boiling.



109) Family number: 20905915 (US3018881A)

Title: ADHESIVE BANDAGE **PACKAGE** **UNIT**

Priority: CH19620000861 19620124 DE1962M051592 19620126 FR19620886200 19620129 US19600033528 19600602

Family:

Publication number	Publication date	Application number	Application date
CH404853 A	19651231	CH19620000861	19620124
DE1254818 B	19671123	DE1962M051592	19620126
FR1314185 A	19630104	FR19620886200	19620129
GB1001421 A	19650818	GB19620003345	19620129
NL132475 C	00000000		00000000
NL274018 A	00000000		00000000
US3018881 A	19620130	US19600033528	19600602

Probable Assignee: 3M CO

Assignee(s):(std)**:** 3M CO ; MINNESOTA MINING AND MFG

Assignee(s): MINNESOTA MINING AND MFG CO ; MINNESOTA MINING AND MANUFACTURING COMPANY

Inventor(s):(std)**:** WALL THOMAS H ; WALL THOMAS HENRY ; THOMAS H WALL

Inventor(s): H WALL THOMAS

International class (IPC 8-9): A61F13/02 A61F15/00 B65D75/30 (Advanced/Invention); A61F13/02 A61F15/00 B65D75/28 (Core/Invention)

International class (IPC 1-7): A61F13/02 A61F15/00 A61L15/06 B29C19/007 B29C27/10

CPC: A61F13/0206 A61F13/0259 A61F13/0246 A61F13/0203 A61F15/001 B65D75/30

European class: A61F13/02 A61F13/02B A61F15/00B B65D75/30

US class: 206/441

Classification Explorer

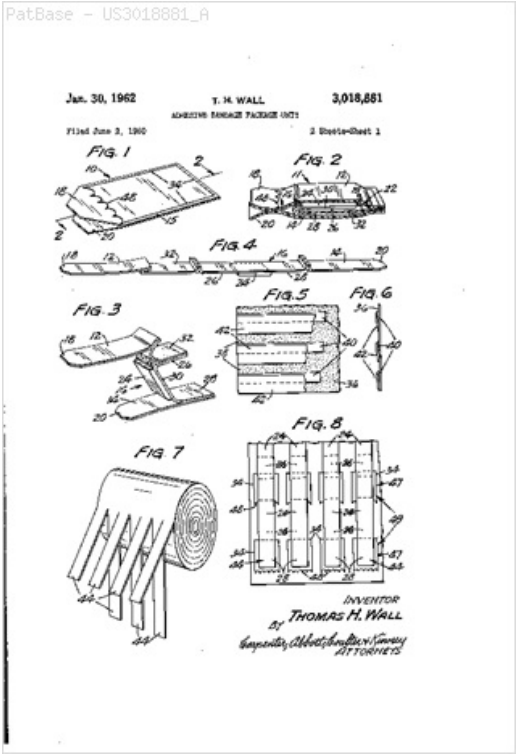
Cited documents: US2840080 A, US2752038 A, US2402982 A, GB883916 A, FR662591 A, DE1027844 B,

Forward Citations: WO9620686, WO9620686, WO9406382, WO8600220, WO07101660, WO03032881, WO03032881, USD611156, USD604423, USD578651, USD573260, USD495419, US9101510, US9084695, US8752702, US8663171, US8277427, US7854322, US6742522, US6566575, US6159497, US6149614, US5979450, US5656282, US5593395, US5052381, US5035687, US5010883, US4917929, US4917928, US4915228, US4915227, US4815457, US4781293, US4549653, US4499896, US4265234, US4235337, US3528867, US3477194, US3419137, US3247041, US3199945, US3189174, US2015157806, US2014238884, US2010168693, US2010016802, US2008191003, US2007293801, US2007282237, US2006270959, US2006148352, GR89100439, GR89100439, GR890100439, GB2421188, FR2830747, FR2566266, FR2414008, EP2421490, EP2421490, EP1582170, EP0372722, EP0350924, EP0322210, EP0120570, DE4440727, AU710725, AU574476,

Abstract:

Source: GB1001421A 1,001,421. Making **packages**. MINNESOTA MINING and MANUFACTURING CO. Jan. 29, 1962, No. 3345/62. Heading B8C. [Also in Divisions A5 and B5] An adhesive bandage **package** **unit** comprises a folded adhesive bandage enclosed between a pair of panels 12, 14 **sealed** about their periphery, a flap 32 extending into the **package** from one panel 12 being removably adhered to the adhesive at one end 26 of the bandage and the other panel 14 being removably adhered to the adhesive at the other end of the bandage. The intermediate portion of the bandage carries an absorbent pad 24. At the end of each panel opposite to the end where the flap 32 is attached to one panel 12 is a finger **tab** 18, 20. When the finger **tabs** are pulled apart the panels separate and the bandage is unfolded to expose the pad for application to the body. Further pulling on the **tabs** peels the flap and the other panel, respectively, from the adhesive coated ends of the bandage. Such bandage **package** **units** are made by laying absorbent strips 40 on a pressure-sensitive adhesive coated polyethylene backing web 34 and partially **covering** each strip and the portions of the web, which will form the adhesive end portions 26 at one end of each bandage, with a polyethylene strip 42 of a width slightly greater than the finished length of the flaps 32. The absorbent strips 40 are spaced by a distance equal to the sum of the lengths of the end portions 26, 28 of the bandage. The web is slit into strips 44 at right angles to the strips 40, 42 and alternate strips 44 are laid adhesive side down on a polyethylene web 46 for forming the **covering** panels 14, the web 46 having rectangles 47 printed thereon within which the backing web portions forming the other adhesive end portions 28 of the bandages are positioned. Two portions 54, 56 of a folder bar are then disposed to grip between them the adhesive end portions 26 and the **covering** flap 32. The bar is rolled through 360 degrees as adjacent bandages are severed from one another, to fold the bandage so that it overlies the appropriate printed rectangle. The free end of each flap 32 is temporarily secured to the **covering** panel web 46 by an adhesive strip. A second web for forming the other panels 12 is laid over the folded bandage and the bandages are subjected to heat radiation, e.g. from an incandescent lamp with an elliptical reflector, and then pressed lightly together so that the panel web portions and the flaps become heat **sealed** along the lines of the printed rectangle which absorb sufficient heat for this purpose. The individual **packages** are then severed from one another and trimmed, this process removing the temporary adhesive strip.

PatBase - US3018881_A



110) Family number: 22338428 (US3026006A)

Title:	BEVERAGE TAPPING APPARATUS
Priority:	US19590843152 19590929

Family:

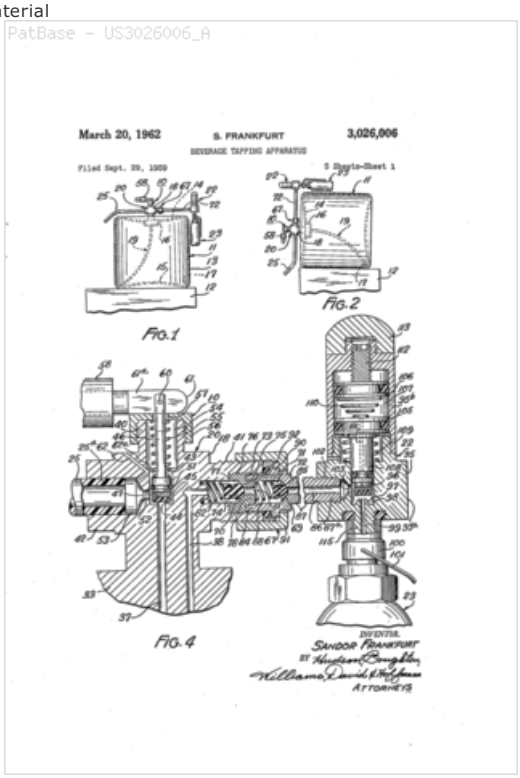
Publication number	Publication date	Application number	Application date
US3026006 A	19620320	US19590843152	19590929

Probable Assignee:	HOME DRAUGHT INC
Assignee(s):(std):	HOME DRAUGHT INC
Inventor(s):(std):	SANDOR FRANKFURT
Inventor(s):	FRANKFURT SANDOR
International class (IPC 8-9):	B67D1/04 (Advanced/Invention); B67D1/00 (Core/Invention)
International class (IPC 1-7):	B67D1/04
CPC:	B67D1/0412
European class:	B67D1/04B
US class:	222/400.7

Classification Explorer

Cited documents:	US842343 A, US732122 A, US587987 A, US2951646 A, US2837375 A, US2770402 A, US2768771 A, US2571433 A, US2310714 A, US2160043 A, US1844360 A, US1406158 A,
Forward Citations:	WO8700515, US7669738, US4850388, US3844449, US3794221, US3327899, US3315844, US3228413,

Abstract:
Source: US3026006A (Claim 1) 1. A tap device for use on a beverage **container** having an **opening** in the wall thereof and a **closure** device of the self-**sealing** type in said **opening**, comprising a housing having a through axial passage including a cleanout **opening** at the outer end of said through passage and a threaded portion surrounding the cleanout **opening**; a draft tube comprising a single tube member and being disposée! in axial alignment with said through passage and projecting from said housing; said draft tube being rigid for insertion into said **container** through said wall **opening** and **closure** device and itself having a pair of parallel longitudinal passages formed directly therein as a gas passage and a beverage passage and being otherwise solid transversely thereof, and a port connected with the gas passage and located in the side of said draft tube at an intermediate point of its length; said housing having a pair of projections extending laterally outward therefrom on opposite sides of said through passage substantially perpendicular to the axis of the latter and provided respectively with gas pressure inlet and beverage discharge passages in communication with the gas and beverage passages of said draft tube; said draft tube having one end thereof engaged in the inner end of said through passage and connected with said housing so that said beverage passage provides a straight axial continuation of said below the connecting passage 172 is an unused passage 75 through passage; and removable **closure** means normally closing said through passage including a threaded portion charge passage, and said **closure** means includes a valve engaged with the threaded portion of said housing. member cooperable with said seat and movable toward 2. A tap device as defined in claim 1 wherein said tube and away therefrom to **open** and closed positions; and member has said longitudinal passages initially formed actuating means effective on said valve member for mov-therein so as to extend through the tube member for the g ing the same to the **open** position. entire length thereof; and plug means disposed in and 6. A tap device as defined in claim 5 wherein said tube closing the portion of said gas passage located beyond member and valve housing are preformed molded memsaid port. bers made of plastic material. 3. A tap device as defined in claim 2 wherein said tube member is an extruded product of moldable material



111) Family number: 20832843 (GB892244A)

Title:	A new or improved **resealable** metallic **container** and method of making the same
Priority:	19590602

Family:

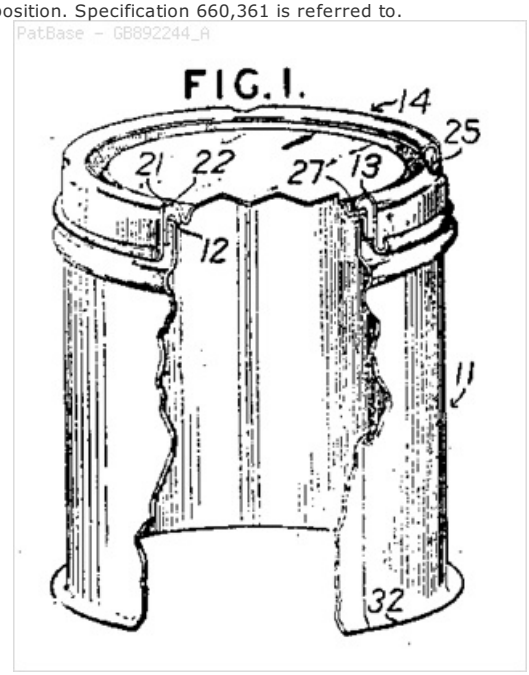
Publication number	Publication date	Application number	Application date
GB892244 A	19620321	GB19600019105	19600530

Probable Assignee:	GRACE W R AND CO
Assignee(s):(std)**:**	GRACE W R AND CO
Assignee(s):	W R GRACE AND CO
International class (IPC 8-9):	B21D51/46 B65D43/02 (Advanced/Invention); B21D51/38 B65D43/02 (Core/Invention)
CPC:	B21D51/46 B65D43/0218 B65D2543/00092 B65D2543/00277 B65D2543/00416 B65D2543/00509 B65D2543/00537 B65D2543/00555 B65D2543/00564 B65D2543/00574
European class:	B21D51/46 B65D43/02S5B L65D543/00Y1F2C L65D543/00Y1M4 L65D543/00Y2K3 L65D543/00Y8D1C L65D543/00Y8D3 L65D543/00Y8D5 L65D543/00Y8G L65D543/00Y8L

Classification Explorer

Forward Citations: US6192609, US5864975, US5806217, US5184655, CN106966035,

Abstract:
Source: GB892244A 892,244. **Container** **closures**; lever lids. GRACE and CO., W. R. May 30, 1960 [June 2, 1959], No. 19105/60. Class 125(3). [Also in Group XXII] A hermetical **container** lid 14 had an annular channel 21 coated with a **sealing** lacquer which forms a bond with a **sealing** element 13 having an annular groove 27 of similar dimensions to a curl 12 formed on the upper edge of the tubular body of the **container** and coated with a material which does not form a bond with the **sealing** element 13. The inner surfaces of indentations 25 in the channel 21 form stops against which the curl 12 is forced to close the **container**. The **sealing** element 13 may be flowed in by means of a nozzle, the curl 12 being then inserted into the inverted lid, Figs. 5 and 6 (not shown), after which the **container** is placed in an oven to cure the composition of which the element 13 is formed. The curl 12 is thereby embedded in the element 13. A food pack is inserted through the **open** **container** end which is then closed by means of a base double seamed to a flange 32 on the **container**. The lid 14 may be levered off the **container** and re-applied. The **sealing** element may be formed of a resinous composition. Specification 660,361 is referred to.



112) Family number: 22903501 (FR1290580A)

Title:	PROCEDE DE FABRICATION DE SACHETS, NOTAMMENT DE SACHETS D'INFUSION METHOD FOR MAKING **BAGS**, PACKS PARTICULAR INFUSION (Machine translation)
Priority:	FR19610862241 19610518

Family:

Publication number	Publication date	Application number	Application date
FR1290580 A	19620413	FR19610862241	19610518

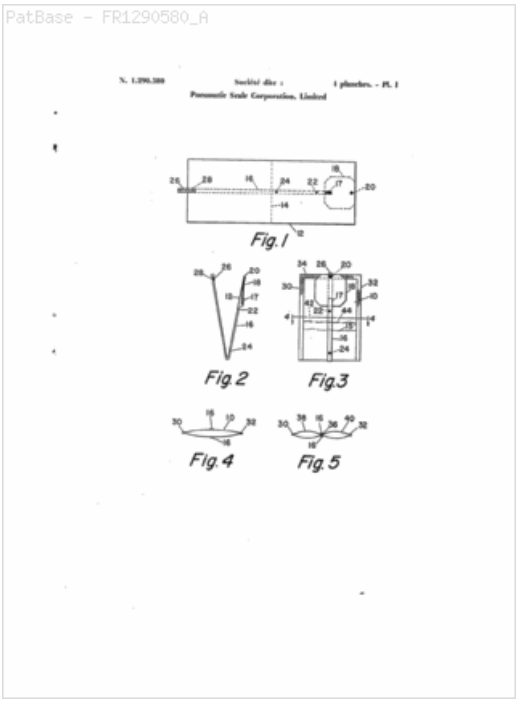
Probable Assignee:	PNEUMATIC SCALE CORP
Assignee(s):(std):	PNEUMATIC SCALE CORP
Assignee(s):	PNEUMATIC SCALE CORP LTD
International class (IPC 8-9):	B65B29/02 B65D81/00 B65D85/812 (Advanced/Invention); B65B29/00 B65D81/00 B65D85/804 (Core/Invention)
International class (IPC 1-7):	B65B29/02
CPC:	B65B29/02 B65D85/812
European class:	B65B29/02 B65D81/00B1A B65D85/812
Classification Explorer	
Forward Citations:	US4961301,

Abstract:
Source: FR1290580A (Claim 1)

ATTENTION debut du champ CLMS peut contenir fin de DESC **.

scellees transversalement.

Machine translation: (Claim 1) ** WARNING ** start of CLMS field may contain end of DESC **. **Sealed** transversely.



113) Family number: 25043676 (US3183799A)

Title: **CONTAINER** MAKING ARRANGEMENT

Priority: DE1961H042368 19610421 DE1961H043459 19610823

Family:

Publication number	Publication date	Application number	Application date
AT244733 B	19660125	AT19620002476	19620327
BE616746 A	19620816	BE19620616746	19620420
CH405914 A	19660115	CH19620003620	19620326
DE1179798 B	19641015	DE1961H042368	19610421
DE1191676 B	19650422	DE1961H043459	19610823
DK105506 C	19661003	DK19620001808	19620418
FI40250 B	19680731	FI19620000716	19620404
GB950705 A	19640226	GB19620007760	19620228
LU41586 A	19620620		19620420
US3183799 A	19650518	US19620225411	19620919

Probable Assignee: HABRA WERK OTT KG

Assignee(s):(std)**:** HABRA WERK OTT KG ; KURT OTT ; WILHELM F OTT

Assignee(s): HABRA WERK WILHELM F OTT ; HABRA WERK

Inventor(s):(std)**:** SCHMIDT PAUL ; SCHMIDT P ; PAUL SCHMIDT

International class (IPC 8-9): B07B1/58 B29C53/36 B31B1/74 B31B1/78 B31B3/00 B31B37/00 B65B55/10 (Advanced/Invention); B07B1/46 B29C53/00 B31B1/74 B31B3/00 B31B37/00 B65B55/04 (Core/Invention)

International class (IPC 1-7): B31B23/60 B31B33/74 B31B37/26 B65B55/10

CPC: B29C53/36 B07B1/58 B65B55/103 B31B70/28 B31B50/741 B31B50/78 B31B70/30 B31B2150/00 B31B2150/0012 B31B2150/003 B31B2155/00 B31B2155/0012 B31B2160/106 B31B2160/20 B65B55/10

European class: B07B1/58 B29C53/36 B31B1/74 B31B1/78 B31B37/00 B65B55/10 B65B55/10B L31B201/28A L31B201/61 L31B219/26A L31B219/26A1 L31B221/10C L31B221/20 L31B221/40A L31B221/60 L31B237/20 L31B237/40A

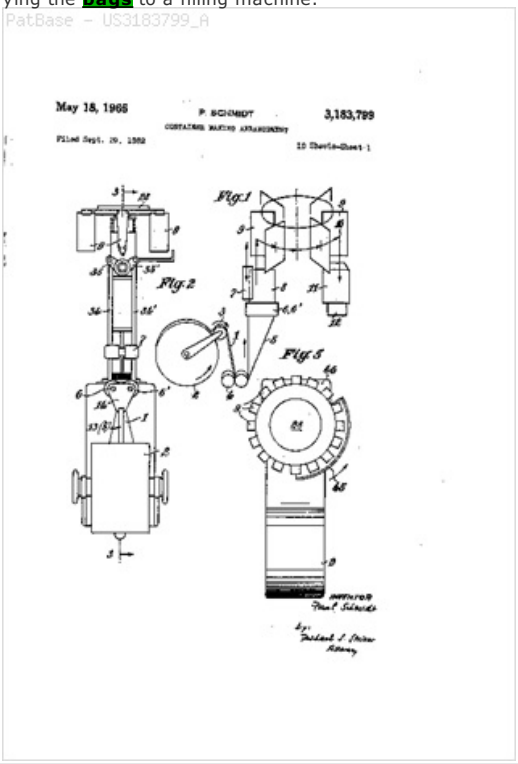
US class: 493/194 493/199 493/203 493/243 493/254 493/309

Classification Explorer

Cited documents: US2698046 A, US2577386 A, DE1104658 A, DE1046997 A,

Forward Citations: US9737913, US7814940, US2017081065, EP1820731, DE1254005,

Abstract:
Source: GB950705A 950,705. Making paper **bags**; seaming non- metallic sheet material. K. OTT, [trading as HABRA-WERK WILHELM F. OTT]. Feb. 28, 1962 [April 21, 1961; Aug. 23, 1961], No. 7760/62. Headings B5D and B5K. [Also in Division F2] Tubes of plastics foil or of plastics-coated paper formed from a web 2 (Fig. 1) by folding and longitudinal welding in machines 5, 8 are subsequently welded and parted transversely by a device 36, 36^1 (Fig. 3), and slipped upwardly over a spreading member 9 which carries the tube in a circular path as its welded bottom end is formed to a rectangular block. In the machine illustrated the longitudinal seam is formed by welding jaws 7 which move vertically to feed the tube. The jaws include resiliently mounted portions 20, 20^1, 21, 21^1 (Fig. 6) for gripping the tube and are carried by pivots 17, 17^1 from a collar 24 reciprocated on a vertical column 23 (Fig. 3) under the action of a cam 27. The transverse weld is effected by jaws 36, 36^1 (Fig. 10) oscillated about a shaft 38 under the control of a further cam 32 (Fig. 3) and carrying parting blades 37, 37^1. The jaws and blades are raised bodily slightly, when welding and parting are complete, to prevent the cut edges of the web sticking together. The walls of the tube are held apart, as the tube is fed upwardly, by members 15, 151, 16, 16^1 (Figs. 3 and 6), and these members may include means for spraying the interior of the **bag** with a liquid or powder sterilizing agent, or may include a radio-active source for sterilization. Each spreading member 9 comprises a pair of hinged plates joined by hinged lower portions 9a (Fig. 10). The mandrels are carried by a head 28 on the column 23 which is rotated by bevel gears 29. The casting for he gear 30, 31 to the machine may include a window 47. A separate housing 48 is provided for the web 2. The welding jaws 7 may be **opened** and closed mechanically or by magnets. Rollers 4 preceding the folding machine 5 preform grooves in the web. Two **bag**-making machines according to the invention may deliver to a single conveyer carrying the **bags** to a filling machine.



114) Family number: 22798132 (US3051368A)

Title:	**DISPENSING CONTAINER**
Priority:	US19580777000 19581128

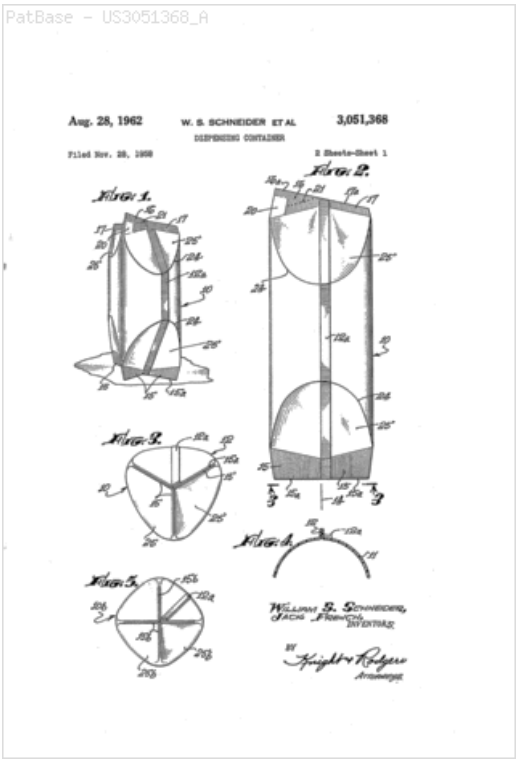
Family:

Publication number	Publication date	Application number	Application date
US3051368 A	19620828	US19580777000	19581128

Probable Assignee:	SCHNEIDER
Assignee(s):(std):	SCHNEIDER
Inventor(s):(std):	JACK FRENCH ; SCHNEIDER WILLIAM S
Inventor(s):	FRENCH JACK
International class (IPC 8-9):	B65D75/12 B65D75/48 B65D75/58 (Advanced/Invention); B65D75/00 B65D75/04 B65D75/52 (Core/Invention)
International class (IPC 1-7):	B65D31/10 B65D35/02
CPC:	Y10S383/906 B65D75/5822 B65D75/12 B65D75/48 B65D2575/586
European class:	B65D75/12 B65D75/48 B65D75/58D1 L65D575/58R L65D75/48
US class:	383/104 383/209 383/210 383/906 383/94 383/96
Classification Explorer	
Cited documents:	US2923404 A, US2919800 A, US2741079 A, US2578445 A, US2444722 A, US2363148 A, US2260064 A, US2234655 A, US2189174 A, US2058592 A, US2053298 A, US1072987 A,
Forward Citations:	WO07008161, USD423923, US9462815, US8992085, US8794836, US7025504, US7011448, US6921203, US6857779, US6783277, US6644539, US6485177, US6435374, US6220756, US6206571, US6193416, US5941642, US5366296, US5060803, US4480751, US4312384, US4282904, US3791570, US3743165, US3734388, US3458111, US3259296, US2015264943, US2013094790, US2005031230, US2004218839, US2004141665, US2004091182, US2004004926, FR2826945, FR2372745, FR2372745, EP0666223, EP0076062, EP0012373, DE102010003399,

Abstract:

Source: US3051368A (Claim 1) 1. A **dispensing** **package** comprising: a quantity of material to be **dispensed**; and a tubular **container** enclosing said material and formed from a section of a continuous web of thin flexible material having one heat **sealable** face, said tubular **container** havin.- opposing longitudinal marginal portions of said web joined together to form a longitudinally extending seam with no cut edge of the web exposed to the material within the **container**, and said _container having at each end marginal portions **sealed** together f ace-to-f ace to close the, **container** and to form at one end of the **container** three radially extending end **seals** of substantiahy equal radial length that meet centrally of the contaiiier and that have one edge substantially in a conimon plane perpendictilar to the axis of the **container** to provide 5 a base upon which the **package** rests.



115) Family number: 22940198 (US3108708A)

Title: **SEALED** PLASTIC **CONTAINERS**

Priority: US19590852040 19591110 US19590859685 19591215

Family:

Publication number	Publication date	Application number	Application date
DE1183857 B	19641217	DE1960P026009	19601110
DE1411581 A1	19681010	DE19601411581	19601215
GB906180 A	19620919	GB19600037387	19601031
GB966821 A	19640819	GB19620025313	19601109
US3096904 A	19630709	US19590859685	19591215
US3108708 A	19631029	US19590852040	19591110

Probable Assignee: PLASTOMATIC CORP

Assignee(s):(std)**:** PLASTOMATIC CORP

Inventor(s):(std)**:** RUMPP HUTCHINSON HERMAN ; HUTCHINSON HERMAN R ; BETNER THOMAS EUGENE ; BETNER THOMAS E

International class (IPC 8-9): B65B51/14 B65B7/28 B65D77/20 B65D77/22 B65D77/38 (Advanced/Invention); B65B51/14 B65B7/28 B65D77/10 B65D77/22 (Core/Invention)

International class (IPC 1-7): B65D17/16 B65D3/10 B65D41/50

CPC: Y02W30/807 B65D77/2052 B65D77/2092 B65D2577/205 B65D2577/2083 B65D77/38 B65B7/2878 B65B51/14 B65D77/22

European class: B65B51/14 B65B7/28F4 B65D77/20E1B3B1 B65D77/20E2B2B B65D77/22 B65D77/38 L65D577/20M1 L65D577/20P1

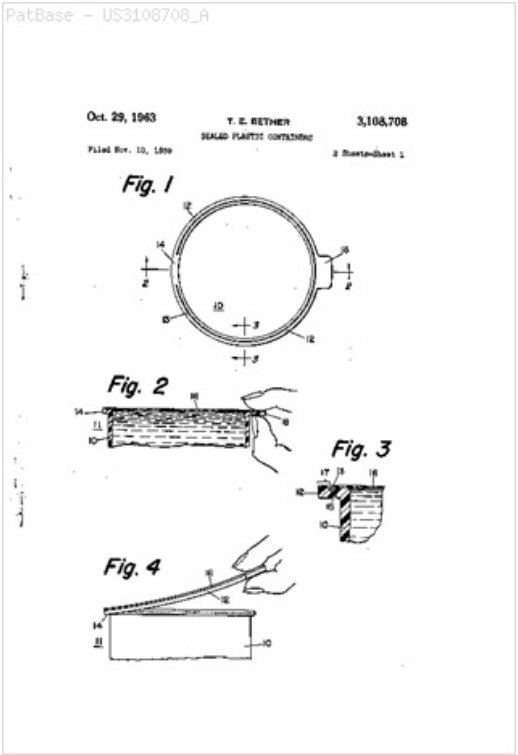
US class: 220/269 220/270 229/123.3 229/125.35 229/207 229/211

Classification Explorer

Cited documents: US2941660 A, US2899782 A, US2887244 A, US2859786 A, US2858659 A, US2837236 A, US2825194 A, US2804987 A, US2784539 A, US2765832 A, US2736656 A, US2711840 A, US2649392 A, US2446422 A, US1773553 A, US1114323 A, US1093735 A, US1047302 A, DE1057012 A,

Forward Citations: WO9626133, WO9110605, WO10010130, WO10010130, WO0005135, WO0005135, USRE31759, USD708511, USD699595, USD687294, USD678047, US5758793, US5429833, US5353943, US5244145, US5178293, US5069355, US5020686, US4905838, US4434907, US4433793, US4098189, US3951331, US3561668, US3515334, US3495759, US3483964, US3398877, US3398876, US3391849, US3371848, US3276616, US3217951, US3184096, US2012318801, FR2618411, FR2559366, FR2504846, EP1930253, EP0379137, EP0332885, EP0306982, EP0241002, DE3244459, DE2848499, DE1295469, CN105151415, CH677473, AT414120,

Abstract:
Source: GB906180A 906,180. **Opening** **containers**. PLASTOMATIC CORPORATION. Oct. 31, 1960 [Nov. 10, 1959], No. 37387/60. Class 66. A **container** 11 of synthetic plastics material has a flange 12 formed with opposed grooves 13, 15 which enable the outer portion of the flange and a **cover** 16 of plastics film to be torn off. The **cover** 16, which may be of polyethylene, coated cellophane, or polypropylene, is heatsealed to the flange 12, and they may be used together, after the flange 12 is torn, to form a re-usable cap. A **tab** 18 aids in tearing the flange. The groove 13 may extend only part of the way round the periphery of the flange 12 so leaving an ungrooved portion of the flange to form a hinge for the **cover**; similarly, the groove 15 may either be part-circular or endless. The **container** may be moulded from polyethylene, or polyprophylene. The **cover** may be of transparent film to enable viewing of the **container** contents, or it may be treated to make it microporous and allow the passage of gas but not of moisture. The **container** may be of rectangular cross-section.



116) Family number: 21598023 (US3061989A)

Title: PACKAGING MACHINE

Priority: US19590857324 19591204

Family:

Publication number	Publication date	Application number	Application date
CH380003 A	19640715	CH19600004134	19600412
DE1230710 A	00000000		00000000
DE1230710 B	19661215	DE1960P028733	19600404
GB944944 A	19631218	GB19600005747	19600218
GB947989 A	19640129	GB19620036690	19600218
US3061989 A	19621106	US19590857324	19591204

Probable Assignee: PACKAGE MACHINERY CO

Assignee(s):(std)**:** PACKAGE MACHINERY CO

Assignee(s): PACKAGE MACHINERY COMPANY

Inventor(s):(std)**:** MEHLHORN CARL E ; KENNETH FIELDS NEWELL ; FRANCIS CRESCENZO ; NEWELL KENNETH F ; EARLE MERRITT CHASE ; CHASE EARLE M ; CARL EMIL MEHLHORN

Inventor(s): CRESCENZO FRANCIS ; MERRITT CHASE EARLE ; FIELDS NEWELL KENNETH ; EMIL MEHLHORN CARL

International class (IPC 8-9): B65B41/14 B65B41/16 B65B9/20 B65B9/213 (Advanced/Invention)

International class (IPC 1-7): B65B41/14 B65B41/16 B65B9/10

CPC: B65B51/30 B65B9/213 B65B41/14 B65B41/16

European class: B65B41/14 B65B41/16 B65B51/30 B65B9/213

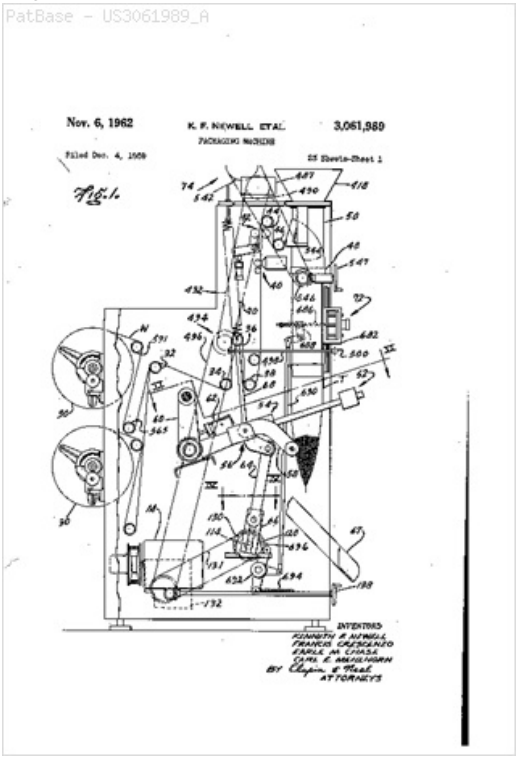
US class: 53/389.2 53/552

Classification Explorer

Cited documents: US2951325 A, US2935829 A, US2899875 A, US2873883 A, US2869298 A, US2832271 A, US2826021 A, US2788625 A, US2776068 A, US2708054 A, US2636732 A, US2618814 A, US2546059 A, US2272702 A, US1986422 A, US1696376 A,

Forward Citations: US8387344, US8146327, US7941991, US7730698, US7631473, US5317858, US4779400, US4676051, US4353196, US4313288, US4291520, US4266389, US4262470, US4106261, US3364650, US3287199, US3195285, US3191356, US3154901, US2011179749, US2010199602, US2008115638, US2006060041, DE1291679, CN103523274, CN103523274,

Abstract:
Source: US3061989A 944,944. Feeding webs. PACKAGE MACHINERY CO. Feb. 18, 1960 [Dec. 4, 1959], No. 5747/60. Heading B6B. [Also in Divisions B4, B5 and B8] In a packaging machine (see Division B8) in which a web W is formed into a tube advanced intermittently and sealed transversely at intervals above increments of material poured into the tube, by vertically reciprocating jaws 52, 54 (see Division B4), the web roll and web are braked on either side of take-up means for drawing lengths of web off the roll prior to its being advanced by the jaws. Web passes from identical rolls 30 to form a double thickness strip and each roll is capable of axial adjustment by engagement of a collar 592 on its shaft 550 with a member 594 on a hand screw 596. The roll brake drum 586 is contacted by a shoe 584 on a lever 572 pivoted at 574 and having secured to it at 570 a cam strip 568, Figs. 22, 23. The web passes round rollers 591 and 565, the latter being mounted on arms 564 pivoted at 562 and one bearing a roller 566. When the web is being fed by the take-up device, the arms 564 rise and the roller, engaging the strip 568, raises the lever 572 and thus the shoe 584 to release the roll 30. The double web travels round rollers 32, 34, 36, 38, Fig. 1, the roller 36 being vertically reciprocated to take up web by links 68 connecting it to the frame 54 on which are mounted the sealing jaws 52, 54. It then passes a photoelectric scanner 40, operative to ensure sealing of the tube in the correct position relative to printing on the web, and between a pair of non- rotatable braking rolls at 42, Figs. 1, 25. One roll 612 is fixed and the other 618 is mounted on arms 620 moved by a lever 628 and air motor 632 to clamp the web against the roll 612 when the web is being drawn from the rolls W by the roller 36. The web then passes over a roller 46 movable horizontally by adjusting screws to vary the angle at which the web approaches a folder 48 of the packaging machine.



117) Family number: 21954713 (US3069066A)

Title:	**CLOSURE** MEANS
Priority:	US19600076539 19601219

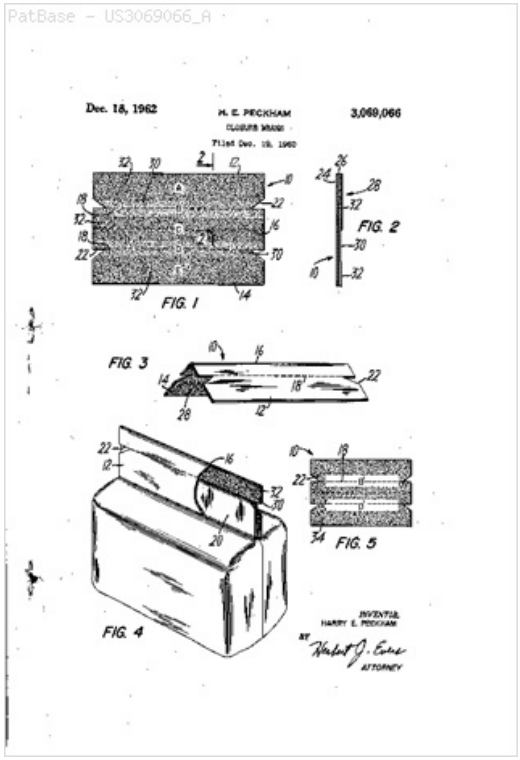
Family:

Publication number	Publication date	Application number	Application date
GB945341 A	19631223	GB19610044583	19611213
US3069066 A	19621218	US19600076539	19601219

Probable Assignee:	NAT BISCUIT CO
Assignee(s):(std):	NAT BISCUIT CO
Assignee(s):	NATIONAL BISCUIT CO ; NATIONAL BISCUIT COMPANY
Inventor(s):(std):	PECKHAM HARRY E
International class (IPC 8-9):	B65D33/16 B65D77/12 (Advanced/Invention); B65D33/16 B65D77/10 (Core/Invention)
International class (IPC 1-7):	B65D33/16 B65D33/30 B65D5/26
CPC:	Y10S383/905 B65D77/12 B65D33/1691
European class:	B65D33/16H B65D77/12
US class:	383/209 383/78 383/81 383/905
Classification Explorer	
Cited documents:	US754201 A, US2779526 A, US2527073 A, US1827636 A, FR893339 A,
Forward Citations:	WO10088047, US9850037, US9302835, US8545099, US8210746, US5660479, US4818120, US4801078, US4634008, US3215333, US3173232, US3163867, US3154239, US2016137356, US2012308166, US2011150368, US2009226117, US2009154845, US2006045392, NL1040069, JP2012516273, JP2008143560, EP1746043, EP0599781, AU2010208613,

Abstract:

Source: GB945341A 945,341. **Packages**; **bags**. NATIONAL BISCUIT CO. Dec. 13, 1961 [Dec. 19, 1960], No. 44583/61. Headings B8C and B8K. A **closure** tape for folding over the flattened mouth of a **bag** has areas devoid of adhesive or of thinner adhesive, these areas flanking the mouth edges of the **bag** so that when part of the tape is torn off, the **bag** may more readily be **opened**. The tape may be heat-**sealed** in position. Areas of thin adhesive B, D traversed by perforated tear lines 18 may be provided so that if the tear line is above the **bag** mouth, the edges of the latter may readily be separated. Alternatively, areas similar to B and D but spaced from the tape ends (Fig. 5, not shown) may have no adhesive coating. The tape may be a laminate including a metal foil which enables the remaining portions 12, after **opening**, to be folded to temporarily close the **bag**, the foil retaining the portions folded.



118) Family number: 21950159 (US3068853A)

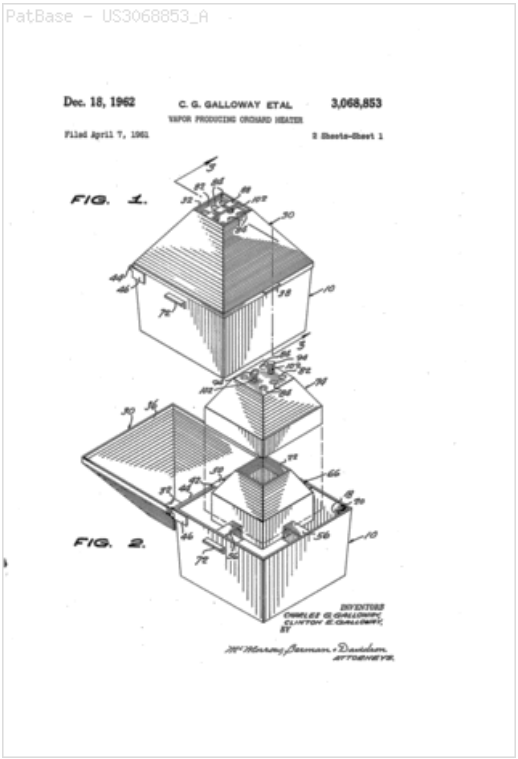
Title:	VAPOR PRODUCING ORCHARD HEATER
Priority:	US19610101575 19610407

Family:

Publication number	Publication date	Application number	Application date
US3068853 A	19621218	US19610101575	19610407

Probable Assignee:	GALLOWAY CHARLES G
Assignee(s):(std):	GALLOWAY CHARLES G ; GALLOWAY CLINTON E
Inventor(s):(std):	GALLOWAY CHARLES G ; GALLOWAY CLINTON E
International class (IPC 8-9):	A01G13/06 (Advanced/Invention); A01G13/06 (Core/Invention)
International class (IPC 1-7):	F23D5/04
CPC:	A01G13/065
European class:	A01G13/06B
US class:	126/350.2 126/59.5 431/299 431/332
Classification Explorer	
Cited documents:	US826067 A, US1024633 A,

Abstract:
Source: US3068853A (Claim 1) 1. A vapor producing orchard heater comprising an **open** top firepot to contain combustible fiuid, a water **container**, means concentr;cally supporting thL- **container** within the **open** top of the firepot, said **container** havidg an op_-n upper end, a jacket spacedly surrounding said **container** and resting upon said supporting means, said jdcket having a top wall spaced abovd thd upper end of the **container**, said top wall being provided with vapor discharge bpening means, a **closure** plate within said **container**, and spring means for elevating. the **closure** pl_te to said top wall for closiiig the vapor discharge **opening** means_



119) Family number: 21986140 (US3070931A)

Title:	**PACKAGING** MACHINE
Priority:	US19610081867 19610110

Family:

Publication number	Publication date	Application number	Application date
US3070931 A	19630101	US19610081867	19610110

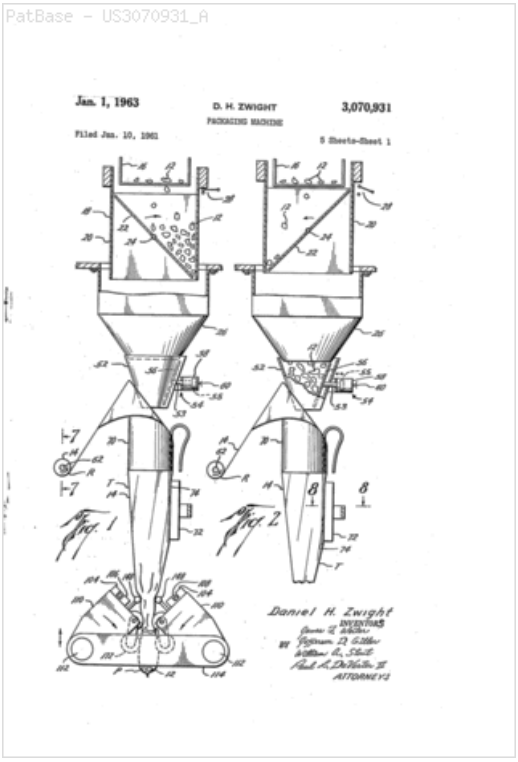
Probable Assignee:	GEN PACKAGING EQUIP CO
Assignee(s):(std)**:**	GEN PACKAGING EQUIP CO
Assignee(s):	GENERAL PACKAGING EQUIPMENT CO
Inventor(s):(std)**:**	ZWIGHT DANIEL H
International class (IPC 8-9):	B65B1/32 B65B9/20 B65B9/213 (Advanced/Invention); B65B9/20 (Advanced/Non-invention); B65B1/30 B65B9/10 (Core/Invention)
International class (IPC 1-7):	B65B1/32 B65B9/12
CPC:	B65B9/2007 B65B9/213 B65B37/18 B65B39/003 B65B51/306 B65B2210/10
European class:	B65B37/18 B65B39/00A2 B65B51/30C B65B9/213 L65B210/10 L65B9/20L
US class:	177/185 53/374.5 53/552

Classification Explorer

Cited documents:	US763560 A, US3006277 A, US2969627 A, US2956383 A, US2950588 A, US2937844 A, US2915866 A, US2869298 A, US2272258 A, US1986422 A,
Forward Citations:	WO08146160, WO08146160, US9598189, US9517851, US9284075, US9056691, US8402724, US7310923, US7213384, US7069709, US6671134, US6581360, US6539692, US6428457, US6178725, US6006503, US5622033, US5575137, US5235794, US5117612, US5063727, US5031386, US4729210, US4663917, US3938299, US3452368, US2016176549, US2013152509, US2012233970, US2009113852, US2007101684, US2005155331, US2004045258, US2003230594, US2002139084, EP2337742, EP1340677, EP1186535,

Abstract:

Source: US3070931A (Claim 1) 1. In a **packaging** machine for **packaging** a product in **packaging** material, weighing and **dispensing** means weighing the product to be **packaged** and **dispensing** the weighed product, forming means forming the **packaging** material into a generally elongate tube, **sealing** and disengaging means **sealing** the product within the tube of packing material and disengaging the finished **package** 50 from the tube, said weighing and **dispensing** means comprising a balance including a tubular body, a door pivot-ably mounted within said body, spring biased toggle means operatively connected to said door and substantially closing said door within said body in each of two positions, 65 said body forming part of a weighing means, means for pivoting said door to the other position when the product reaches a predetermined weight within said body and upon said door, and means for resetting and damping said weighing means after said door has pivoted and 60 released the product trapped therein.



120) Family number: 22004054 (US3072208A)

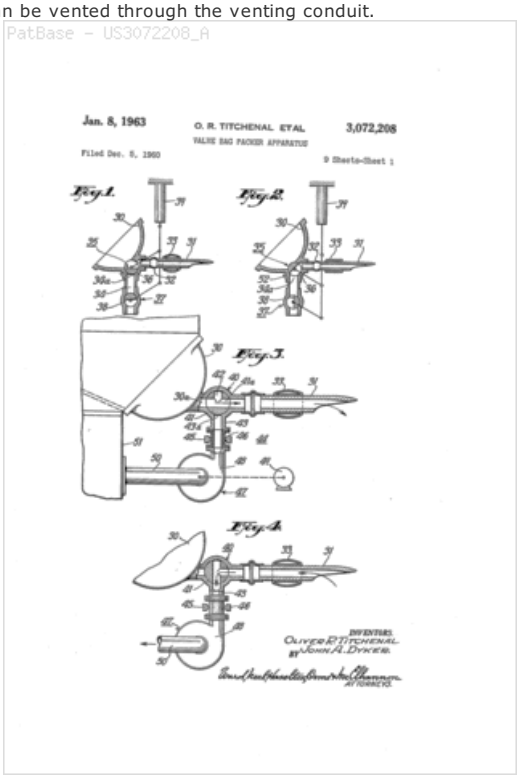
Title:	VALVE **BAG** PACKER APPARATUS
Priority:	US19600073721 19601205

Family:

Publication number	Publication date	Application number	Application date
US3072208 A	19630108	US19600073721	19601205

Probable Assignee:	ST REGIS PAPER CO
Assignee(s):(std)**:**	ST REGIS PAPER CO
Assignee(s):	ST REGIS PAPER COMPANY
Inventor(s):(std)**:**	DYKER JOHN A ; TITCHENAL OLIVER R
International class (IPC 8-9):	B65B1/18 (Advanced/Invention); B65B1/04 (Core/Invention)
CPC:	B65B1/18
European class:	B65B1/18
US class:	141/119 141/312 141/68 141/83 177/71 177/82 222/318
Classification Explorer	
Cited documents:	US870215 A, US2955796 A, US2887292 A, US2866484 A, US2799465 A, US2781799 A, US2733848 A, US2251659 A, US2248877 A, US2192982 A, US1088633 A, GB648312 A,
Forward Citations:	US4574851, US4566505, US4498511, US4471820, US4427040, US3195587, EP1860027, EP0107926, EP0107924, DE1299249, DE1276539, DE102008050729, DE102006024870,

Abstract:
Source: US3072208A (Claim 1) 1. A valve **bag** packing apparatus having in combina-tion: a bin for receiving divided material, the bin having an outlet in. the lower portion thereof; a **bag** filling tube extending to the outlet in the bili; a venting conduit ex-tending to the. aforementioned filling tube, such bin outlet and the venting conduit being connected to a primaTy valve having a shiftaible primary valve plug, such bin outlet being closable and the venting conduit **openable** by such primary valve plug in a first position, and the mouth of the venting conduit being closable and the bin outlet **openable** in response to such valve plug being shifted to a second position; a secondary valve positioned in said venting conduit, such secondary valve including a shiftable secondary valve plug; and means for moving said valve plugs, and in response to movement of said plugs to a first joint operating position closing said venting conduit mouth and simultaneously closing said secondary valve, the **opening** from the bin thus being **opened** for the flow of material from the bin into a valve **bag** on the filling tube, and in response to movement of said plugs to a second joint operating position the **opening** in the bin is closed and the mouth of the venting tube **opened** and also the secondary valve is **opened** whereby a filled **bag** on the filling tube can be vented through the venting conduit.



121) Family number: 22725022 (US3180541A)

Title: Pitcher and **cover**

Priority: US19600000297 19600104 US19620205140 19620516 US19620205141 19620516 US19620205142 19620516

Family:

Publication number	Publication date	Application number	Application date
US3081010 A	19630312	US19600000297	19600104
US3180540 A	19650427	US19620205141	19620516
US3180541 A	19650427	US19620205142	19620516
US3181746 A	19650504	US19620205140	19620516

Probable Assignee: REXALL DRUG CHEMICAL

Assignee(s):(std)**:** REXALL DRUG CHEMICAL

Assignee(s): REXALL DRUG AND CHEMICAL CO ; REXALL DRUG AND CHEMICAL COMPANY

Inventor(s):(std)**:** TUPPER EARL S

International class (IPC 8-9): B65D47/08 (Advanced/Invention); B65D47/08 (Core/Invention)

International class (IPC 1-7): B01D15/08 B65D51/04

CPC: B65D47/0895 B65D2251/1016

European class: B65D47/08D4F1 L65D251/10D

US class: 215/384 215/43 222/465.1 222/498 222/512 222/545 222/556 D7/316 D7/317 D7/318 D9/450 D9/528

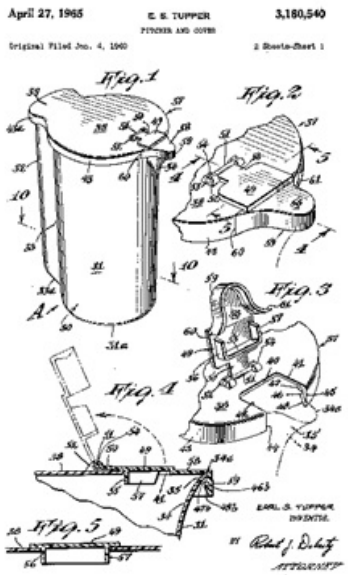
Classification Explorer

Cited documents: US2891704 A, US2886218 A, US2859786 A, US2842167 A, US2832517 A, US2805561 A, US2764200 A, US2764199 A, US2746199 A, US2741402 A, US2690852 A, US2253177 A, US2169547 A, US2168822 A, US2022342 A,

Forward Citations: WO04076307, USD802851, USD763039, USD714144, USD582274, USD582273, USD559623, USD533452, USD532691, USD532298, USD530610, USD513452, USD509426, USD472105, USD459941, USD442086, USD439789, US9868572, US9475623, US8955705, US8899437, US8235238, US7784635, US7134575, US6932249, US6561376, US5186366, US5103988, US4903870, US4655373, US4492323, US3985457, US3915355, US3773232, US3254811, US2010308047, US2008105678, US2006076260, US2005135978, US2004173622, US2003154967, US2003094460, DE3415168, DE3242567,

Abstract:
Source: US3180541A (Claim 1) 1. A **cover** and **closure** combination for use on a **container** having bottom and side walls and a top **opening**, the top of the side walls having outward extensions forming a peripheral rim at said **opening**; said **cover** overlying said top **opening** and having a **dispensing** **opening**; a downwardly directed flange integral with the underside of the **cover**; said flange resiliently and tightly engaging said rim to releasably **unite** the **cover** and **container**; said **dispensing** **opening** being defined by vertically disposed peripheral walls forming part of said **cover**; a pair of vertically extending slots in said walls; a **closure** mount for swinging movement about a pivot point on said **cover**, said **closure** overlying the **dispensing** **opening** when the **closure** is in closed position; said slots being spaced from each other and one slot being located on each side of said pivot point; a downwardly directed flange integral with the underside of said **closure**, said flange being constructed and arranged to be received within said **dispensing** **opening** between said slots and in the area closest to said pivot point, and to be received within each of said slots, and engageable with the outside of said peripheral walls around the remainder of the **dispensing** **opening**; said **closure** flange resiliently and tightly engaging the peripheral walls of the **dispensing** **opening** to **seal** the contents of said **container**.

PatBase - US3180540_A



122) Family number: 22153386 (US3082586A)

Title:	**PACKAGING** MACHINE
Priority:	US19600019857 19600404

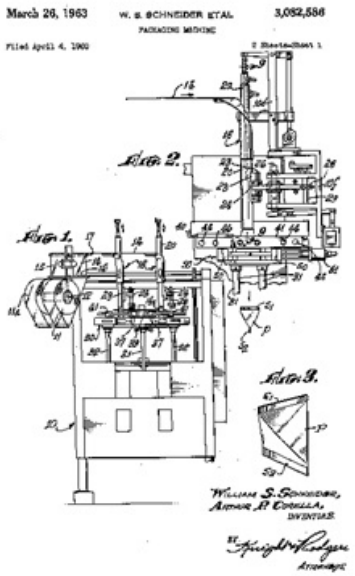
Family:

Publication number	Publication date	Application number	Application date
GB944847 A	19631218	GB19600032106	19600919
US3082586 A	19630326	US19600019857	19600404

Probable Assignee:	PACKAGING FRONTIERS INC
Assignee(s):(std):	PACKAGING FRONTIERS INC
Inventor(s):(std):	CORELLA ARTHUR P ; SCHNEIDER WILLIAM S
International class (IPC 8-9):	B65B9/12 B65B9/213 (Advanced/Invention); B65B9/20 (Advanced/Non-invention); B65B9/10 (Core/Invention)
International class (IPC 1-7):	B65B9/10 B65B9/12
CPC:	B65B9/12 B65B9/2056 B65B9/213
European class:	B65B9/12 B65B9/213 L65B9/20T
US class:	53/552
Classification Explorer	
Cited documents:	US2741079 A, US2549327 A, US2449139 A, US2265253 A, FR1184321 A,
Forward Citations:	WO8200986, WO10130403, WO10130403, WO06066895, US6691491, US5865015, US5548947, US4552613, US3326097, US3221469, US3187476, ITVI20090116, GB2256415, GB2256415, EP0104696,

Abstract:
Source: GB944847A 944,847. **Packaging**. **PACKAGING** FRONTIERS Inc. Sept. 19, 1960 [April 4, 1960], No. 32106/60. Heading B8C. A machine for producing tetrahedral **packages**, by forming a web of packing material around a combined filling head and mandrel, has **sealing** means for forming transverse **seals** across the tube alternately at right angles to each other above the level of the product and means to feed the tube intermittently downwards. The machine produces two or more **packages** simultaneously each of which may be a single tetrahedron pack or a double pack containing different products as shown in Fig. 13. Tube formation.-Heat-**sealable** webs are fed from rolls 11, 11a to formers 18, 18a (Figs. 2 and 3), which wrap the webs around the mandrels 20, 20a to form tubes having flanges 14c (Fig. 4), which are heat-**sealed** by pairs of **sealing** jaws 23, 23a, the jaws being mounted on pivot-pins 26, 26a in a scissors-like arrangement. The two pairs of jaws are linked for simultaneous movement by a rod 34. When each seam 14d leaves the **sealing** jaws it is in a radial position relative to the tube, but it is then folded down against the wall of the tube by idler rollers 67, 68 (Figs. 3, 12a). The transverse **sealing** means (Figs. 2, 5) consists of a carriage 37 mounted on four rotatable and vertically movable shafts 38, 58. A crank 39 in the form of a disc having a pair of crank pins 40 is mounted on the top of each of the shafts 38. Pivotally connected to each one of the pins 40 is an arcuate connecting link 41, the other end of each connecting link being connected to one of two bars 42, 42a, one either side of a frame member 43. A bar 44a is rigidly attached, by means of rods 47 which slide freely through bars 42a and frame member 43, to the bars 42. Bar 44 is similarly attached to bar 42a. The bars 42, 42a, 44, 44a each support a **sealing** jaw 45 or 45a. On rotational oscillation of the rods 38 the cranks 39 cause each of the pairs of **sealing** heads 45, 45a to move together and then to separate again, thus transversely **sealing** the web tubes. **Sealing** jaws 53, 53a mounted at a lower level on bars 54 are similarly connected by cranks 57 to rods 58. Scissors-like cutting blades 61, 62 (Fig. 2), sever a double pack simultaneously from each **sealed** tube. In a modification (Figs. 14, 15, 17, not shown), pneumaticallydriven cutters are mounted within one of each pair of **sealing** jaws, each cutter entering a slot in the other jaw of the pair and single **packages** being severed from each tube. A stripping means for stripping the web from the transverse **sealing** jaws when these incorporate cutters may be provided this taking the form of a pair of rods 168 worked by an over-centre action of a spring 174 and abutments 177, 168 on the jaws themselves (Fig. 16). **Package** filling.-The product to be **packaged**, e.g. a liquid is delivered through a known metering valve 36 through tubes 21, 21a. If the machine is used to produce double packs (shown in Fig. 13) containing two different products, a second set of tubes 21, 21a and metering valve 36 is provided, the two sets working alternately between successive transverse **sealing** operations. In a modification (Fig. 19, not shown), air at a pressure slightly above atmospheric is introduced into the mandrel, this slight pressure being sufficient to distend the filled tube prior to **sealing**, thus ensuring that the transverse **seals** are free from wrinkles. Web feed and transverse **sealing** synchronization.-Each web has printed on it indicia 135, as shown in Fig. 13, for scanning by photoelectric eyes 137, (137a), (Fig. 2). The carriage 37 is adjusted to pull down slightly over a **package** length on each stroke, and when this overrun accumulates sufficiently to displace the mark 135. from out of the beam of the eye a solenoid 140, 140a (Figs. 3, 4), is energized which by means of a lever 142, 142a, lifts the pivotpin 26, 26a slightly when the **sealing** jaws 23, 23a are being operated, thus raising the jaws to pull back the web and correct the overrun. As an alternative, the carriage could pull off under a **package** length and the jaws pull down the webs. Each web is adjusted independently. The web may carry graduations to indicate the amount of contents remaining in a partly used **package**.

PatBase - US3082586_A



123) Family number: 22794554 (US3082583A)

Title:	**CONTAINER** AND METHOD OF FORMING SAME
Priority:	US19600043525 19600718 US19620248628 19621231

Family:

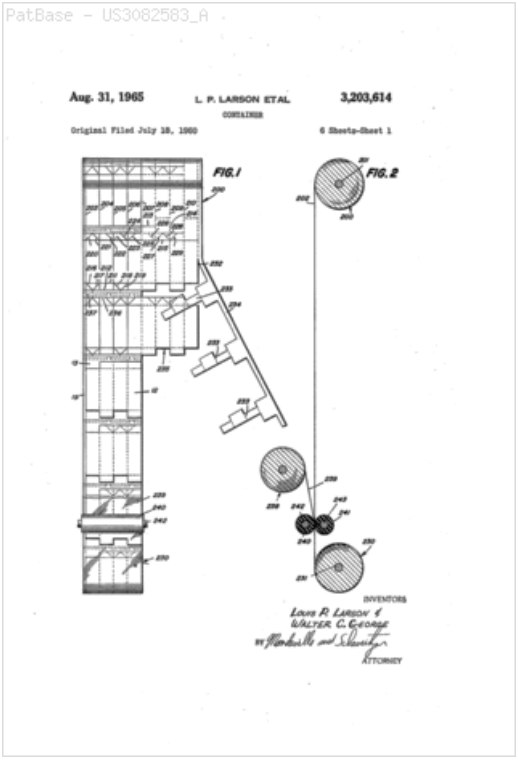
Publication number	Publication date	Application number	Application date
US3082583 A	19630326	US19600043525	19600718
US3203614 A	19650831	US19620248628	19621231

Probable Assignee:	RIEGEL PAPER CORP
Assignee(s):(std):	RIEGAL PAPER CORP ; RIEGEL PAPER CORP
Inventor(s):(std):	GEORGE WALTER C ; LARSON LOUIS P
International class (IPC 8-9):	B65B9/20 B65B9/213 B65D5/06 (Advanced/Invention)
International class (IPC 1-7):	B65B9/10 B65D5/70
CPC:	B65D5/065 B65B9/2049 B65B9/2056 B65B9/213
European class:	B65B9/20S B65B9/213 B65D5/06C1
US class:	229/216 493/228 493/231 53/451

Classification Explorer

Cited documents:	US2964226 A, US2959336 A, US2925948 A, US2874524 A, US2775082 A, US2773634 A, US2769290 A, US2759290 A, US2665616 A, US2409460 A, US2372452 A, US2337730 A, US2336503 A, US2335865 A, US2214593 A, US2146831 A,
Forward Citations:	WO17157675, US8215085, US6539692, US6195965, US5971266, US5704886, US4881360, US4848063, US4817366, US4776147, US4185765, US4124159, US3924796, US3620439, US3599538, US3593911, US3585908, US3335540, US3263391, US2010019020, US2009172872, US2005156020, US2002139084, JP52084440, JP50026673, EP3219630, EP0995679, EP0302413, EP0302413, EP0024752, AU606188,

Abstract:
Source: US3082583A (Claim 1) 1. T'i'ie method of forming and filling a succession ofrectangular **containers** which comprises the steps of scoring a continuous sheet of paperboard longitudinally to present a series of panels thereacross and providin- transverse score lines betnveen at least some of the adjacent longitudinal score lines to determine foldable **closure** sections of the thus formed connected to.-ether **container** blanks, forming the continuous sheet into a roll, feeding the sheet of predeterriiiped **container** blanks from the roll and erecting the same into tubular fashion about the longitudinal scoring, infoldir._ together and sealin.- foldable **closure** sections of ad_ace-ii-t **container** blanks, introducing a comliiodity into the tube above such **seal**, then **sealing** the tube by infolding together the next successive **closure** section to include the commodity in a completely **sealed container**.



124) Family number: 757385 (US3354041A)

Title: Nuclear reactor refuelling device

Priority: FR19620888608 19620220 FR19620906112 19620803 FR19630943376 19630731 FR19640995388 19641118 FR19630953298 19630213

Family:

Publication number	Publication date	Application number	Application date
AT240990 B	19650625	AT19630001304	19630219
AT251118 B	19661212	AT19630006228	19630802
AT253630 B	19670410	AT19640006393	19640724
AT261763 B	19680510	AT19650009927	19651103
BE628674 A	00000000		00000000
BE635777 A	00000000		00000000
BE651037 A	19641116	BE19640651037	19640727
BE671571 A	19660214		19651028
CH449128 A	19671231	CH19630001916	19630215
ES290479 A2	19631116	ES19630290479	19630731
ES294883 A1	19640316	ES19630294883	19631227
ES302673 A2	19660201	ES19640302673	19640731
FR1326401 A	19630510	FR19620888608	19620220
FR82510 E	19640228	FR19620906112	19620803
FR84093 E	19641120	FR19630943376	19630731
FR86733 E	19660401	FR19640995388	19641118
GB1001926 A	19650818	GB19640030726	19640804
GB1018948 A	00000000		00000000
GB1066519 A	19670426	GB19650045729	19651028
GB953298 A	19640325	GB19630005872	19630213
IL24548 A1	19690227	IL19650024548	19651031
LU43189 A	19630416		19630214
LU44176 A	19631001		19630731
LU46534 A	19640915		19640715
LU49805 A	19660110	LU19650049805	19651110
NL289213 A	00000000		00000000
NL296129 A	00000000		00000000
NL6408560 A	19650426	NL19640008560	19640727
NL6514852 A	19660520	NL19650014852	19651116
US3194742 A	19650713	US19630299504	19630802
US3196082 A	19650720	US19630257894	19630212
US3279627 A	19661018	US19640382459	19640714
US3354041 A	19671121	US19650505886	19651101

Probable Assignee: COMMISSARIAT ENERGIE ATOMIQUE

Assignee(s):(std)**:** COMMISSARIAT A L ENERGIE ATOMIQUE ; COMMISSARIAT ENERGIE ATOMIQUE ; D EXPL DES MOYENS DE TRANSP SI

Assignee(s): INDUSTRIELLE D EXPLOITATION DES MOYENS DE TRANSPORT SIMOTRA SOC ; SOCIETE INDUSTRIELLE D EXPLOITATION DES MOYENS DE TRANSPORT SIMOTRA ; COMMISSARIAT R L ENERGIE ATOMIQUE

Inventor(s):(std)**:** AUBERT MICHEL ; AUBERT MICHEL DIPL ING ; BROUARD DANIEL ; DANIEL BROUARD ; FORTIN GUILLAUME ; FORTIN GUILLAUME DIPL ING ; GEORGES LEMESLE ; GUGENBERGER RENE ; MARCEL MONTEIL ; MARTIN ROGER DIPL ING ; MICHEL AUBERT DIPL ING ; PIERRE ROUGE ; ROGER MARTIN ; ROLAND ROCHE ; ROLAND ROCHE CLAMART ; ROUGE PIERRE DIPL ING ; ROUGE PIERRE ; ROCHE ROLAND ; RENE GUGENBERGER ; MONTEIL MARCEL ; MICHEL AUBERT ; MARTIN ROGER ; MARCEL GEORGES LEMESLE ROGER M ; LEMESLE GEORGES ; GUILLAUME FORTIN

Inventor(s): MARCEL GEORGES LEMESLE ROGER MARTIN ; ROCHE CLAMART ROLAND ; DIPL ING AUBERT MICHEL ; DIPL ING GUILLAUME FORTIN ; DIPL ING MICHEL AUBERT ; DIPL ING PIERRE ROUGE ; DIPL ING ROGER MARTIN

International class (IPC 8-9): G21C13/028 G21C19/02 G21C19/06 G21C19/18 (Advanced/Invention); G21C13/00 G21C19/00 G21C19/02 (Core/Invention); G21C (Subclass/Invention)

International class (IPC 1-7): E06B5/10 G21C13/02 G21C13/028 G21C19/02 G21C19/06 G21C19/18

CPC: G21C13/0285 G21C19/02 G21C19/18 Y02E30/40 G21C19/06 G21C19/065

European class: G21C13/028B G21C19/02 G21C19/06 G21C19/06D G21C19/18 Y02E30/40

US class: 376/264 376/268 376/269 376/272 414/146 976/DIG.245 976/DIG.247 976/DIG.249 976/DIG.258

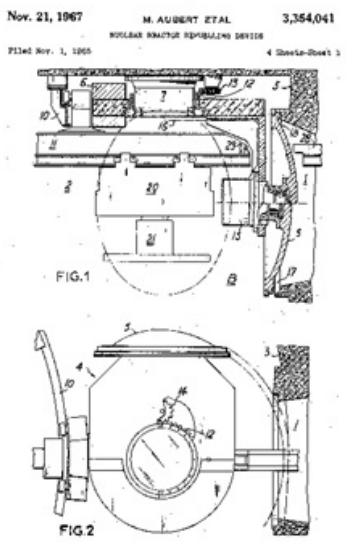
Classification Explorer

Cited documents: US3279627 A, US3196082 A, US3194742 A, US3125232 A, US3066089 A, FR1230954 A,

Forward Citations: WO09077691, WO09077691, US8135108, US4756870, US4649016, US4647423, US4533513, US4519519, US4469697, US4053067, US3640339, US3489298, US3445012, US3354041, US3291326, US3279627, FR2924853, DE1297776,

Abstract:
Source: US3354041A ABSTRACT OF THE DISCLOSURE
A gas cooled reactor is mounted in a containment shield enclosing a garret. A refuelling device in the garret includes a **storage** system and a handling system for fuel element magazines for placing and replacing fuel elements in the channels. A system is also provided for supplying to and removing fuel element magazines from the garret including a lock chamber and a door for the lock chamber.

PatBase - US3354041_A



125) Family number: 905597 (US3361020A)

© PatBase

Title: CABLE-CUTTING APPARATUS

Priority: FR19620898156 19620521 US19590844441 19591005 US19640344095 19640211 US19670618742 19670227 US19670618743 19670227 US19640359053 19640413 US19680708135 19680226 US19670618745 19670227

Family:

Publication number	Publication date	Application number	Application date
FR1325971 A	19630503	FR19620898156	19620521
GB977175 A	19641202	GB19620007357	19620226
US3128521 A	19640414	US19590844441	19591005
US3281911 A	19661101	US19640359053	19640413
US3305907 A	19670228	US19640344095	19640211
US3361020 A	19680102	US19670618742	19670227
US3384939 A	19680528	US19670618743	19670227
US3412439 A	19681126	US19670618745	19670227
US3504066 A	19700331	US19680708135	19680226

Probable Assignee: AMERICAN CONCRETE CROSSTIE CO

Assignee(s):(std)**:** CHARLES WILLIAM CONE ; DOUGLAS P CONE ; DOUGLAS POE CONE ; JULIAN LEE CONE JUNIOR ; J L CONE JR C W CONE ; AMERICAN CONCRETE CROSSTIE CO

Assignee(s): AMERICAN CONCRETE CROSSTIE CORP

Inventor(s):(std)**:** JR JULIAN LEE CONE ; CONE DOUGLAS POE ; CONE CHARLES WILLIAM ; BAKER ROBERT S ; BAKER ROBERT SHANNON

Inventor(s): ROBERT S BAKER

International class (IPC 8-9): B28B13/06 B28B15/00 B28B23/04 B28B23/06 (Advanced/Invention); B28B13/00 B28B15/00 B28B23/02 (Core/Invention)

International class (IPC 1-7): B28B15/00 B28B23/04 B28B5/04 B28D1/08 B65G37/02 B65G49/00 E04G21/12

CPC: B28B15/00 Y10S425/116 Y10S425/117 Y10S425/118 B28B13/06 B28B23/06 B28B23/04 Y10T24/3909 Y10T83/4473 Y10T83/541 Y10T83/778 Y10T83/8735

European class: B28B13/06 B28B15/00 B28B23/04 B28B23/06

US class: 24/122.6 242/420.6 249/97 25/1 264/228 264/39 264/71 414/421 414/564 425/111 425/123 425/125 425/126.1 425/128 425/135 425/229 425/253 425/289 425/404 425/421 425/452 425/99 425/DIG.116 425/DIG.117 425/DIG.118 83/214 83/370 83/488 83/554

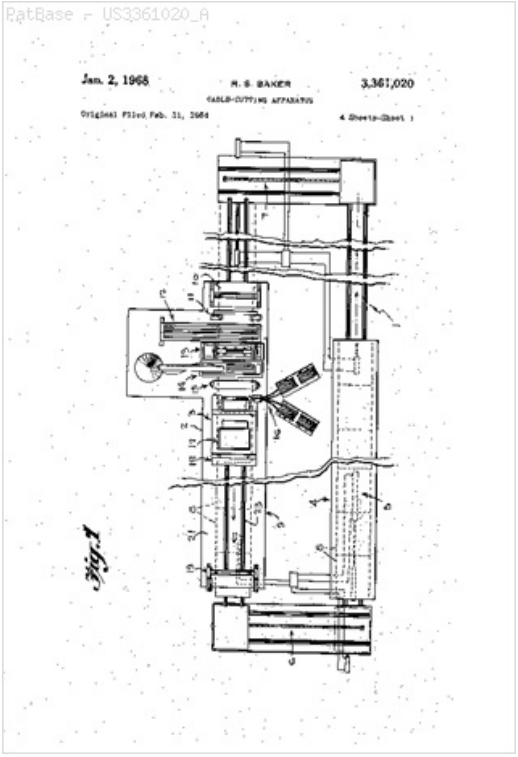
Classification Explorer

Cited documents: US974372 A, US644520 A, US611180 A, US3305907 A, US3223379 A, US3217375 A, US3189971 A, US3181213 A, US3142106 A, US3132403 A, US3128521 A, US3070867 A, US3061904 A, US3055073 A, US3013372 A, US3006053 A, US2996782 A, US2966717 A, US2959267 A, US2935172 A, US2901808 A, US2835016 A, US2821005 A, US2787042 A, US2787041 A, US2778088 A, US2745164 A, US2695754 A, US2689999 A, US2686963 A, US2653371 A, US2590478 A, US2578620 A, US2569231 A, US2566848 A, US2556928 A, US2554118 A, US2496016 A, US2437003 A, US2431618 A, US2423557 A, US2394228 A, US2266357 A, US2237618 A, US2147776 A, US2131474 A, US1796636 A, US1793208 A, US1632286 A, US1560618 A, US1486056 A, US1440716 A, US1429459 A, US1425015 A, RU147494, NL13274 C, NL13274, GB784184 A, GB769720 A, GB647780 A, GB306762 A, GB144193 A, FR1062188 A, DE1047098 B,

Forward Citations: US8701569, US8522694, US8438981, US8420179, US8167605, US8015727, US7748972, US6814906, US6425751, US5439629, US5000655, US4952129, US4661054, US4493177, US4381852, US4214655, US4128384, US3994657, US3966375, US3946631, US3898027, US3859021, US3827132, US3810726, US3732053, US3732044, US3720493, US3695129, US3685782, US3656634, US3620285, US3578187, US3577613, US3577610, US3571866, US3525131, US3523343, US3504066, US3448496, US3384939, US3305907, US3223379, US2015151932, US2009315210, US2008035901, US2005102854, US2002125593, FR3051007, FR2657382, FR2643848, FR2404821, EP3241657,

Abstract:
Source: US3361020A ABSTRACT OF THE DISCLOSURE
Cable-cutting apparatus which utilizes spaced power saws, each vertically slidable, with a control system including a counter, the counter being operable in response to saw motor load to cause sequential movement of the saws into cutting position. cutting apparatus wherein motor load is used as a control for the cutting operation. Other objects of the invention will become apparent from the following description of one practical embodi- ment thereof, when taken in conjunction with the drawings which accompany, and form part of, this specification. Brief description of the drawings Figure 1 is a schematic plan view illustrating the 1 degrees lay-out of the entire prestressed concrete forming machine, and showing the position of the cable-cutting apparatus with respect to the other parts of the machine; Figure 2 shows in side elevation that portion of the machine which includes the cable-cutting apparatus; Figure 3 is a vertical transverse section through the machine at the cable-cutting station and is taken on the line 3—3 of Figure 2; and Figure 4 is a diagrammatic view of the electrical circuit controlling operation of the cable-cutting saws. Cross-reference to related application This application is a division of co-pending application of Robert S. Baker, Serial No. 344,095, filed Feb. 11, 1964, now Patent No. 3,305,907, for Machine for Making Prestressed Concrete Members. B

PatBase - US3361020_A



126) Family number: 22212778 (US3089298A)

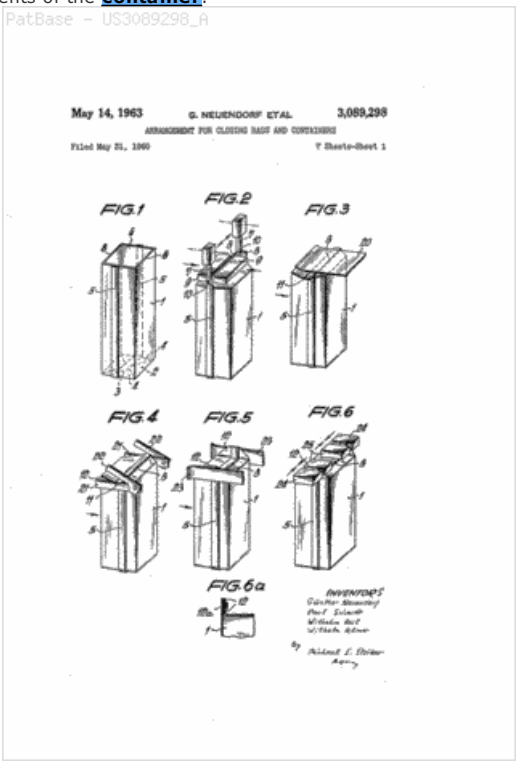
Title:	ARRANGEMENT FOR CLOSING **BAGS** AND **CONTAINERS**
Priority:	19590602 US19600032967 19600531

Family:

Publication number	Publication date	Application number	Application date
US3089298 A	19630514	US19600032967	19600531

Probable Assignee:	HABRA WERK OTT KG
Assignee(s):(std):	HABRA WERK OTT KG ; WILHELM F OTT
Assignee(s):	HABRA WERK
Inventor(s):(std):	PAUL SCHMIDT ; GUNTHER NEUENDORF ; WILHELM REIL ; WILHELM ROMER
Inventor(s):	NEUENDORF GUNTHER ; REIL WILHELM ; ROMER WILHELM ; SCHMIDT PAUL
International class (IPC 8-9):	B65B7/06 (Advanced/Invention); B65B7/00 (Core/Invention)
International class (IPC 1-7):	B65B7/06
CPC:	B65B7/06
European class:	B65B7/06
US class:	53/370.6 53/373.6 53/374.5 53/374.7 53/374.9 53/479 53/512 53/564
Classification Explorer	
Cited documents:	US2949715 A, US2881573 A, US2692074 A, US2634562 A, US2292295 A, US2243805 A, US2168241 A,
Forward Citations:	USRE31853, US6616334, US6539692, US6226964, US6195965, US5966899, US5791465, US5642599, US5369933, US4813545, US4776147, US4763461, US4730435, US4044528, US3766710, US3438176, US2002139084, JP57199504, JP56142131, JP52118757, JP49094477,

Abstract:
Source: US3089298A (Claim 1) 1. A **container**-making apparatus, comprising, in com-bination, a first support member for supporting a **container** having an **open** end; a second support member, one of said support members being movable toward and away from the other support member; a pair of spreading mem- 25 bers mounted on said second support member movable between an inoperative position closely spaced from each other and a farther spaced spreading position; a pair of **sealing** members mounted on one of said support members movable in a direction transverse to the movement of said 30 spreading members between a farther spaced inoperative position and a closely spaced **sealing** position, said **sealing** members being located in said **sealing** position between said spreading members in said spreading position and having a length smaller than the spacing between said 35 spreading members in said spreading position; control means operatively connected to said one support member and to said spreading and **sealing** members for first mov-ing said one supporting member to a position in which said spreading members are located in the **open** end of a 40 **container** supported on said first supporting member, for then moving said spreading members to said spreading position and for thereupon moving said **sealing** members to said **sealing** position for **sealing** superimposed **container** wall portions spread by said spreading members 45 whereby latéral flaps are formed, and for moving said spreading and **sealing** members in reverse order to said inoperative positions and said one supporting member away from the other supporting member, means for cutting said flaps, and means for collapsing and **sealing** said 50 flaps so that each of said flaps can be independently **opened** for discharge of the contents of the **container**.



127) Family number: 22851281 (US3122301A)

Title:	RECLOSABLE **CONTAINER**
Priority:	US19620183930 19620330

Family:

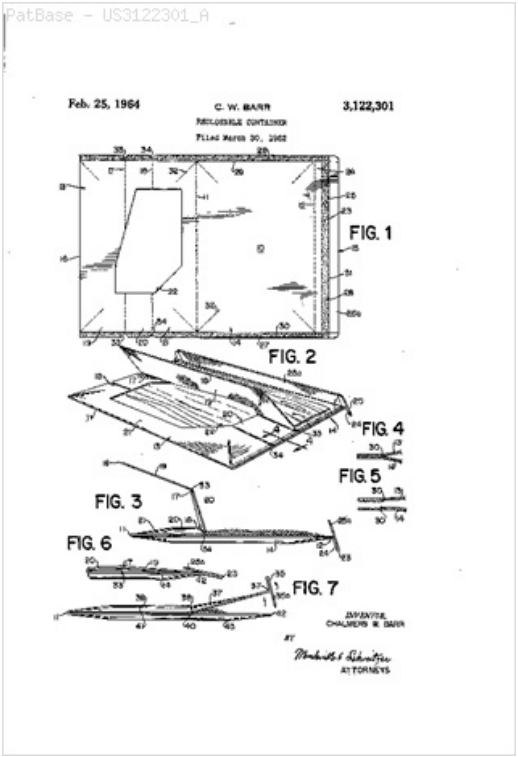
Publication number	Publication date	Application number	Application date
GB1025736 A	19660414	GB19630008095	19630228
LU43356 A	19630515		19630315
US3122301 A	19640225	US19620183930	19620330

Probable Assignee:	RIEGEL PAPER CORP
Assignee(s):(std):	RIEGEL PAPER CORP
Inventor(s):(std):	BARR CHALMERS W
International class (IPC 8-9):	B65D75/20 B65D75/52 B65D75/58 (Advanced/Invention); B65D75/04 B65D75/52 (Core/Invention)
International class (IPC 1-7):	B65D81/34
CPC:	B65D75/20 B65D75/522 B65D75/5855
European class:	B65D75/20 B65D75/52B B65D75/58F
US class:	229/208 229/221 229/87.11

Classification Explorer

Cited documents:	US915124 A, US346620 A, US2996236 A, US2963215 A, DK67656 A, BE548933 A,
Forward Citations:	WO9507145, WO14149815, US6326214, US6033627, US5747351, US5441698, US4375482, US4371553, US3259303, RU2616855,

Abstract:
Source: GB1025736A 1,025,736. **Packages**; reclosable **bags**. RIEGEL PAPER CORPORATION. Feb. 28, 1963 [March 30, 1962], No. 8095/63. Headings B8C and B8K. A bacon pack blank with diagonal score lines at the corners to accommodate the thickness of the contents is folded about a central line 11 (Fig. 1, not shown), the two walls are adhesively secured at 26, 27, and an end **closure** flap 25a is formed to overlap the edge 16, by adhesively securing the portion 24 to the portion 25. The top panel 13 has crease lines 17, 18 and side notches 33, 34 to facilitate partly **opening** the pack by a predetermined amount, and subsequently the pack may be reclosed by the flap 25a. Score lines to ease tearing the pack **open** are made immediately inward of the adhesive side seams and a transparent window 22 is placed in the upper wall. In an alternative embodiment the end **closure** flap 25a is formed on the upper wall 13. To accommodate the thickness of the contents of the pack short holding score lines 32 are made at the corners of the pack in the top and bottom walls. The blank may be made of a material with heat-**sealable** properties or may have a heat-**sealable** coating over part of or its entire surface.



128) Family number: 22767075 (US3092281A)

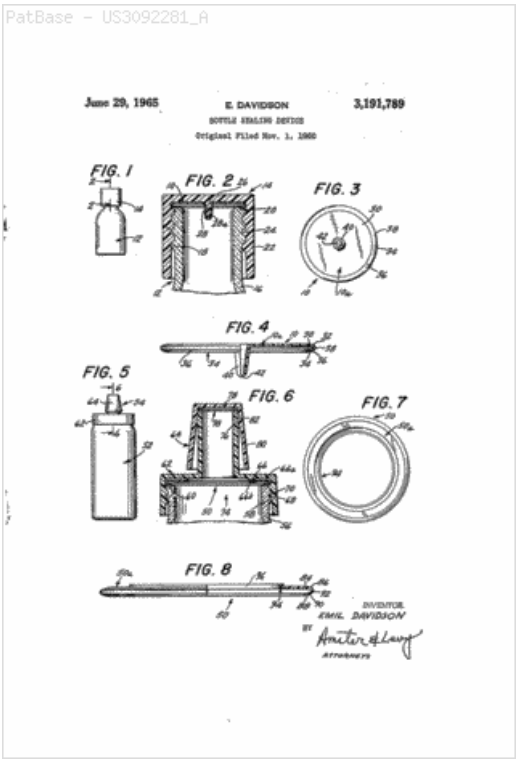
Title:	**SEALING** DEVICE
Priority:	US19600066479 19601101 US19630276844 19630430

Family:

Publication number	Publication date	Application number	Application date
US3092281 A	19630604	US19600066479	19601101
US3191789 A	19650629	US19630276844	19630430

Probable Assignee:	GUILD MOLDERS
Assignee(s):(std):	GUILD MOLDERS
Assignee(s):	GUILD MOLDERS INC ; GUILD MOLDERS INC A CORP OF DE
Inventor(s):(std):	EMIL DAVIDSON
Inventor(s):	DAVIDSON EMIL
International class (IPC 8-9):	B01L3/02 B65D41/04 (Advanced/Invention); B01L3/02 B65D41/04 (Core/Invention)
International class (IPC 1-7):	B65D53/04
CPC:	B65D41/0435 B01L3/0282
European class:	B01L3/02F B65D41/04D
US class:	206/15.3 215/228 215/329 215/349 215/350 215/352 215/353 422/934
Classification Explorer	
Cited documents:	US2772704 A, US2102673 A, SE154131 C1, FR1240644 A, FR1226696 A, FR1131201 A, FR1060557 A, FR1053809 A, DE913132 A,
Forward Citations:	WO9826900, US9867589, US9561344, US9463335, US9436989, US9108047, US9005166, US8454561, US6935537, US5954957, US5826747, US5480028, US5174460, US4238042, US4176757, US3224617, US3160269, US2010185040, US2005139623, FR2462354,

Abstract:
Source: US3092281A (Claim 1) 1. A devire for providing a **seal** between ia cap iand -the neck of a bottle comprising first iand second tannular and generary par_al_lel **sealing** members, each iof said soaling _members having seahn.- sii_faces facing in opposite directions for engagement respectively with the cap iand the bottlel ia flexible joining segment integrafly formed wiith said **sealing** members and SuPp(_gt;,Pting same for in- dependent movement _of said members to _accommoda_te irregularities dn the cap ;and bott-le respectively, -and an inte,__y formed collar extending from one _of said **sealing** members along the axis of isaid **sealing** device for engagement with the upper antemal edge of said bottle neck _for providing f-urther seaung means between the bottle,andthe bottle cap.



129) Family number: 22242242 (US3092943A)

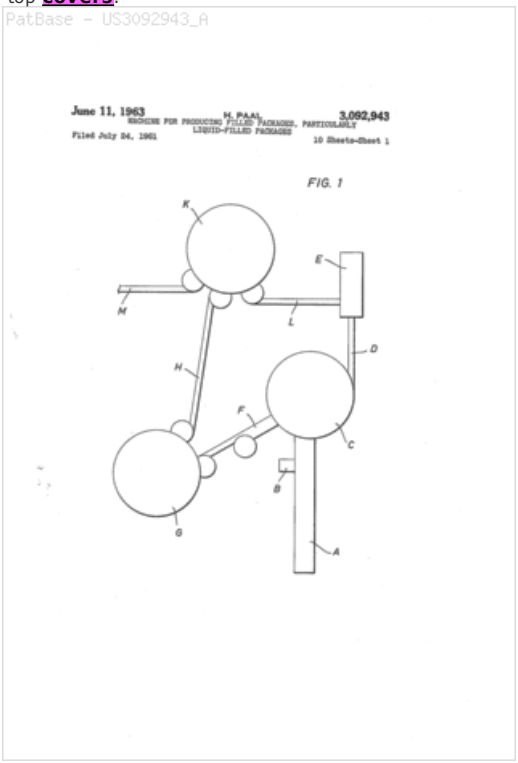
Title:	MACHINE FOR PRODUCING FILLED **PACKAGES**, PARTICULARLY LIQUID-FILLED **PACKAGES**
Priority:	19600725 US19610126020 19610724

Family:

Publication number	Publication date	Application number	Application date
US3092943 A	19630611	US19610126020	19610724

Probable Assignee:	FR HESSER MASCHF F AG
Assignee(s):(std):	FR HESSER MASCHF F AG ; FR HESSER MASCHINENFABRIK AG F
Assignee(s):	FIRMA FR HESSER MASCHINENFABRIK AKTIENGESELLSCHAFT ; FR HESSER MASCHF AG FA
Inventor(s):(std):	HANS PAAL
Inventor(s):	PAAL HANS
International class (IPC 8-9):	B65B3/02 (Advanced/Invention); B65B3/00 (Core/Invention)
International class (IPC 1-7):	B65B3/02
CPC:	B65B3/02
European class:	B65B3/02
US class:	493/189 493/210 53/547
Classification Explorer	
Cited documents:	US2697313 A, US2580456 A, US2520224 A, US2256263 A,
Forward Citations:	US3473293,

Abstract:
Source: US3092943A (Claim 1) 1. A machine for producing **packages** of the kind con-sisting of Alled **containers** each comprising a sleeve-form body portion and top and bottom **covers** secured thereto in a fluid-tight manner, said machine including, in com-bination, a supply reel carrying **packaging** material in strip form, a device operable for continuously forming tubing with an overlap seam from said material fed from the supply reel, a mechanism which travels with said tubing for a predetermined distance and is operable for separating therefrom sleeve-form **container** body portions, a continuously rotating mandrel wheel, mandrels mounted on said wheel, movable grippers with which said mandrels are equipped, a device which functions to transfer the continuously separated **container** body portions to the mandrels, the aforesaid grippers functioning to draw the said body portions on to the mandrels, a feed device associated with the mandrel wheel for feeding thereto preformed **container** bottom **covers**, a mechanism comprising a continuously rotating series of devices associated with the mandrels and operable for welding said bottom **covers** to the **container** body portions, a Alling means suc-ceeding the mandrel wheel for Alling the **containers** with contents, a mechanism following said Alling means and operable for welding preformed top **covers** on to the filled but still **open** **containers** to close the same, and thus complete the **packages**, and a feed device associated with 3,093,94ff the said top **cover** welding mechanism for feeding thereto said top **covers**.



130) Family number: 22920002 (US3093293A)

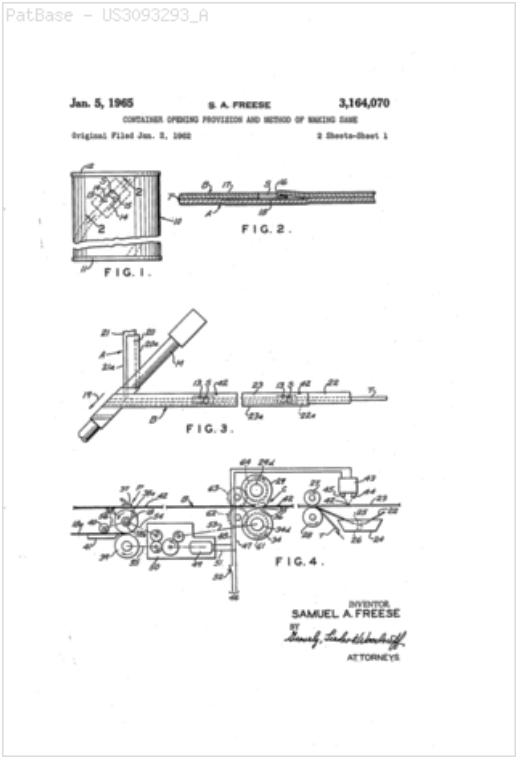
Title:	**CONTAINER OPENING** PROVISION
Priority:	US19620163757 19620102 US19630268790 19630328

Family:

Publication number	Publication date	Application number	Application date
US3093293 A	19630611	US19620163757	19620102
US3164070 A	19650105	US19630268790	19630328

Probable Assignee:	CONTAINER CORP
Assignee(s):(std):	CONTAINER CORP
Assignee(s):	CONTAINER OF AMERICA CORP
Inventor(s):(std):	FREESE SAMUEL A
International class (IPC 8-9):	B31B1/90 B65D3/26 (Advanced/Invention); B31B1/74 B65D3/00 (Core/Invention)
International class (IPC 1-7):	B65D17/16 B65D5/54
CPC:	Y10S206/83 Y10T83/4836 B65D3/267 B31B50/8126 B31B50/00
European class:	B31B1/90 B65D3/26B3C L31B201/90B3A
US class:	206/830 229/202 346/33F 493/67 493/84 493/87 83/345
Classification Explorer	
Cited documents:	US3051370 A, US3042286 A, US3035753 A, US2904240 A, US2895865 A, US2795366 A, US2775395 A, US2737091 A, US2679349 A, US2553877 A, US2233423 A, US2120629 A, US2107462 A,
Forward Citations:	US7757935, US5076440, US4657142, US4182225, US3912571, US3891135, US3331549, US2007295795,

Abstract:
Source: US3093293A (Claim 1) 1. A **container** for **packaging** material coniprising an inner wall layer spirally wound, an ouler wall layer spirally wound upon said inner layer, said layers being adhesively **united**, tear means disposed between said layers and extending spirally about the **container** with said spirally wound ou'Ler wall layer, and means on the **container** for **opening** the sam- by tearing said outer wall layer away to expose said inner wall layer, said **opening** means including a **tab** formed in the outer wall layer including a length of said tear means and a fold in said outer wall layer spaced from the **tab**, said fold being formed by underlapping a portion of the outer wall layer opposite said **tab** to form a gap space in said outer wall layer to expose the end of said tap.



131) Family number: 22257843 (US3094269A)

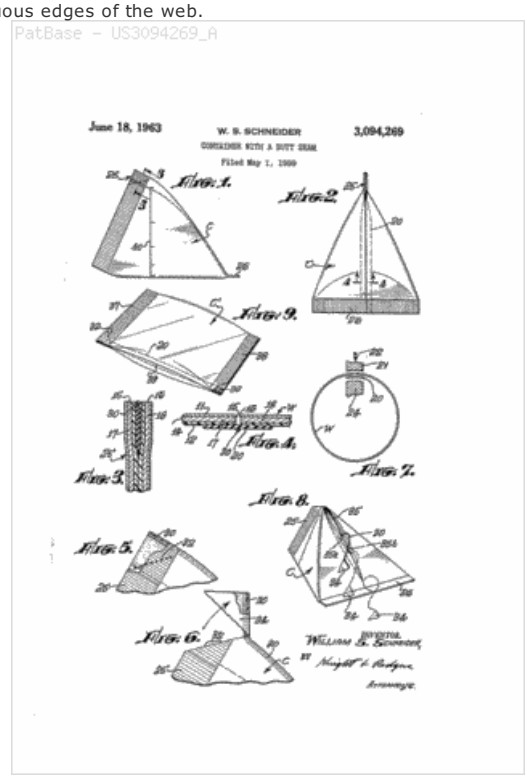
Title:	**CONTAINER** WITH A BUTT SEAM
Priority:	US19590810304 19590501

Family:

Publication number	Publication date	Application number	Application date
US3094269 A	19630618	US19590810304	19590501

Probable Assignee:	PACKAGING FRONTIERS INC
Assignee(s):(std):	PACKAGING FRONTIERS INC
Inventor(s):(std):	SCHNEIDER WILLIAM S
International class (IPC 8-9):	B65D75/50 B65D75/68 (Advanced/Invention); B65D75/00 B65D75/52 (Core/Invention)
International class (IPC 1-7):	B65D17/50 B65D33/00 B65D33/16
CPC:	B65D75/50 B65D75/68
European class:	B65D75/50 B65D75/68
US class:	383/206
Classification Explorer	
Cited documents:	US2699285 A, US2565622 A, US2226936 A, US2169936 A, US1978035 A, US1936417 A, US1853013 A, US180773 A, US1155740 A, CH246680 A,
Forward Citations:	USRE34024, US8523437, US7320545, US7165887, US7086782, US6913387, US6910806, US6360513, US5186543, US4881931, US4795035, US3991758, US3968926, US3930500, US3711011, US3565329, US3516537, US3426959, US3276669, US3196757,

Abstract:
Source: US3094269A (Claim 1) 1. A filled **package** comprising a tube formed from a web of flexible **packaging** material and being heat-**sealable** on the inside, the longitudinal edges of the web being con-tiguous and secured together by a **sealing** strip on the inside of the tube, said strip being heat-**sealable** on both its faces and lapping and heat-**sealed** to the longitudinal mar-gins of the web thereby providing a longitudinal tube seam, each end of the tube being closed by a transverse inside-face-to-inside-face heat **seal**, one of said transverse **seals** comprising an end portion of the tube flattened in such a plane that the portion of the web included there- 5 in is folded on a fold line at one end of said one transverse **seal** and the longitudinal edges of said portion of the web are located at the corner of the **package** at the other end of said one transverse **seal** with the end portion of said strip at said corner folded on a fold line at said other end 10 of said one transverse **seal**, a tearing member secured to said strip on the inside thereof extending longitudinally of the strip substantially in register with said contiguous longitudinal edges of the web, the interengaging faces of said folded end portion of said strip being heat-**sealed** 15 together about the tearing member with said tearing member terminating at the ends of said strip within said transverse **seals**, and a line of weakness at said corner extending inward from the respective end of the tube across said one transverse **seal** and across the respective end portion of 20 said strip to provide a tear-off corner portion of said one transverse **seal** and said strip for freeing the respective end of the tearing member whereby the tearing member along with the tear-off corner portion heat-**sealed** there-about may be gripped and pulled to tear the strip between 25 the contiguous edges of the web.



132) Family number: 22257577 (US3094244A)

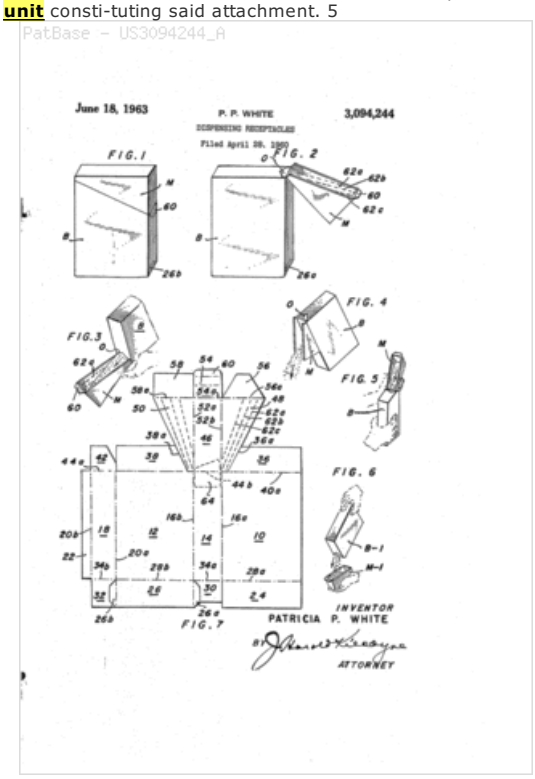
Title:	**DISPENSING** RECEPTACLES
Priority:	US19600025368 19600428

Family:

Publication number	Publication date	Application number	Application date
US3094244 A	19630618	US19600025368	19600428

Probable Assignee:	WHITE PATRICIA P
Assignee(s):(std):	WHITE PATRICIA P
Inventor(s):(std):	WHITE PATRICIA P
International class (IPC 8-9):	B65D5/76 (Advanced/Invention); B65D5/72 (Core/Invention)
International class (IPC 1-7):	B65D5/70
CPC:	B65D5/76
European class:	B65D5/76
US class:	206/229 222/23 222/424.5 222/454 222/556 222/572
Classification Explorer	
Cited documents:	US887953 A, US2770403 A, US2688422 A, US2430204 A, US1240563 A,
Forward Citations:	WO08040958, USD777039, USD767991, USD705055, USD526761, US8672196, US8453890, US7063237, US5115966, US3425602, US3338502, US2013025740, US2012160881, US2012018438, US2003205590,

Abstract:
Source: US3094244A (Claim 1) 1. A **dispensing** receptacle for granular and like flow-able materials comprising, in combination, a carton-type receptacle having a permanently closed top wall pro-4d vided with a small-area contents-**dispensing** **opening** dis-posed immediately adjacent one end edge of said top wall and a measuring attachment hingedly connected to said receptacle along said end edge, said measuring 50 attachment comprising a combined **dispensing**-**opening** **cover** and a **dispensed**-contents receiving and containing **unit**, said **unit** extending the full width of said receptacle and adapted in its closed position to telescope over and hood the closed top and upper end portion of said re-55 ceptacle and in a first **open** position to receive material **dispensing** from said receptacle through said **opening** and in a second **open** position to discharge the so-received material, said **unit** having indicia représentative of the quantity of the material received therein from the re-60 ceptacle, said receptacle and measuring attachment being formed complete from a single blank of sheet material folded to form a receptacle proper and the aforesaid combination **cover** and measuring **container** **unit** consti-tuting said attachment. 5



133) Family number: 22739626 (US3097983A)

Title:	AUTOMATIC **LABELLING** APPARATUS
Priority:	US19610088209 19610209

Family:

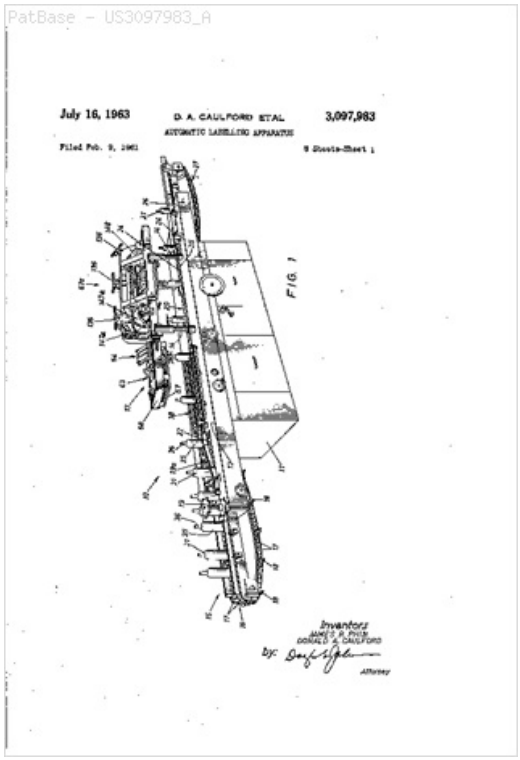
Publication number	Publication date	Application number	Application date
DE1297530 B	19690612	DE1961U010903	19610816
GB999257 A	19650721	GB19610024556	19610706
GB999258 A	19650721	GB19620005871	19610706
GB999259 A	19650721	GB19620005872	19610706
US3097983 A	19630716	US19610088209	19610209

Probable Assignee:	UNIVERSAL LABELLING MACHINES L
Assignee(s):(std)**:**	CANADIAN STACK POLE LTD ; CANADIAN STACKPOLE LTD ; CANADLAN STACKPOLE LTD ; UNIVERSAL LABELLING MACHINES L
Assignee(s):	UNIVERSAL LABELLING MACHINES LTD ; CANADIAN STACK POLE LIMITED ; UNIVERSAL LABELLING MACHINES LIMITED ; CANADLAN STACKPOLE LIMITED ; CANADIAN STACKPOLE LIMITED
Inventor(s):(std)**:**	A CAULFORD DONALD ; CAULFORD DONALD A ; PHIN JAMES R ; ROWLEY PHIN JAMES
International class (IPC 8-9):	B65C3/20 B65C9/04 B65C9/36 (Advanced/Invention); B65C3/00 B65C9/00 B65C9/26 (Core/Invention)
International class (IPC 1-7):	B65C3/20
CPC:	B65C3/20 B65C9/04 B65C9/36
European class:	B65C3/20 B65C9/04 B65C9/36
US class:	156/364 156/492 156/493 156/DIG.15
Classification Explorer	
Cited documents:	US2910167 A, US2683549 A, US2626075 A, US2528944 A, US1995306 A,
Forward Citations:	US7017820, US3663336, US3450586, US3206348, US2016264281, EP0422425, EP0241709, DE1511889,

Abstract:

Source: GB999257A 999,257. Feeding sheets. CANADIAN STACKPOLE Ltd. July 6, 1961 [Feb. 9, 1961]. No. 24556/61. Heading B6B. [Also in Division B8] Relates to a top-strapping **labelling** machine in which bottles or other **containers** of generally circular configuration are fed continuously in upright disposition on a conveyer to a **labelling** station, the bottles being engaged by means in advance of the **labelling** station for rotating and orienting the bottles so that **labels** are applied to a selected position thereon. **Label** feed mechanism.-The **label** magazine 64, Fig. 5, consists of an inclined plate 71 down which extends flat strips 70 having upstanding projections 70a, Fig. 11, which engage the lowermost edge of the stacked **labels**. The **labels** are located between a pair of bars 72 pivoted in adjustable brackets 73 at their upper ends and adapted to be raised and lowered over the plate 71. The lower ends of the bars 72 support a cross-bar 74 pivoted at 74a and carrying adjustable brackets 75 slidable on the bar 74 and provided with a leaf spring 231 bearing against the upper edges of the **labels** stacked on the plate 71. Each leaf spring can be adjusted by a spring-loaded threaded pin 234 and the lower tip of a second spring- loaded pin 235 engages the outer surface of the lowermost **label** 238 to hold it against dislodgement. A suction bar 76 is adapted to pivot as shown in Fig. 11, for extraction of a **label** by means of cam, gear and lever mechanism under the control of a switch operated by contact with a bottle moving on the conveyer 20. In the absence of a bottle, no **label** is extracted. The **labels** 238 extracted by the suction bar 76 are presented to spaced grippers 80, Fig. 6, mounted on a continuously rotating drum 81 at its periphery, the grippers 80 engaging a free end of the **label** projecting from one end of the bar 76 and being drawn off lengthwise of the bar. The transfer is facilitated by an air blast from a member 275, Fig. 13b (not shown). Each gripper 80 consists of a fixed finger 88 having a surface 93 on which the end of the **label** is placed on transfer from the suction bar. A pivoted gripping finger 94 is spring-urged into contact with the surface 93 but is adapted to be moved to the **open** position by means of a fixed cam 104 engaged by a roller 103 carried by a bar on which the finger 94 is mounted. Mounted behind each fixed finger 88 is a **container**-centering structure 106 comprising parallel plates 107 which together with the periphery of the drum define a channel formation at the bottom of which is a resilient pad of sponge rubber against which a gripped **label** is adapted to lie. The surface of the pad is contacted by a roller 110 freely rotatable in a water-filled receptacle 111 in order to soften the **label** and permit it to receive adhesive more readily. The **label** is brought into positive contact with a gluing roller 120 by a device 125 fixed to the frame and provided with projections 132 adapted to engage beneath the **label** being drawn therepast, to lift the **label** from the pad into contact with the roller 120. An L-shaped member 133 pivoted at 133a and provided with a projection 134 is adapted to extract the end of a **label** from the gripping fingers 88, 94 just as the **label** is being applied to the bottle 21, the bottle cap 175 being centred by the plates 107 so that the **label** is centred on the cap.

PatBase - US3097983_A



July 16, 1963 D. A. CAULFORD ETAL 3,097,983

AUTOMATIC LABELLING APPARATUS

Filed Feb. 9, 1961 9 Sheets-Sheet 1

FIG. 1

Inventors
JAMES R. RICE
DONALD A. CAULFORD
by: Douglas Attorney

134) Family number: 21891744 (US3145129A)

Title:	APPARATUS FOR MANUFACTURING **BAGS**
Priority:	US19600048296 19600808

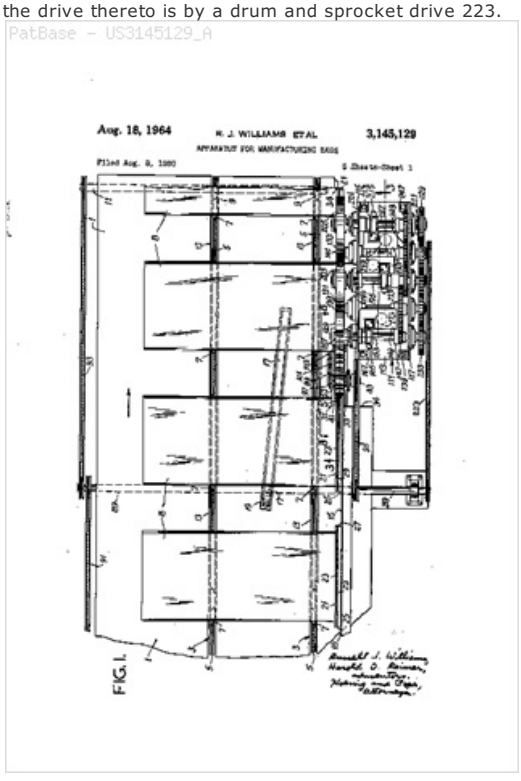
Family:

Publication number	Publication date	Application number	Application date
DE1284890 B	19681205	DE1961B063563	19610807
GB932682 A	19630731	GB19610026495	19610721
US3145129 A	19640818	US19600048296	19600808

Probable Assignee:	BEMIS BRO BAG CO
Assignee(s):(std):	BEMIS BRO BAG CO ; BEMIS CO INC
Assignee(s):	BEMIS COMPANY INC ; BEMIS BRO BAG COMPANY
Inventor(s):(std):	WILLIAMS RUSSELL J ; REIMER HAROLD D ; JOHN WILLIAMS RUSSEL ; DAVID REIMER HAROLD
International class (IPC 8-9):	B31B19/60 B65C5/04 (Advanced/Invention); B31B19/00 B65C5/00 (Core/Invention)
International class (IPC 1-7):	B31B21/60 B65C5/04
CPC:	Y10T156/1339 Y10T156/1343 B65C5/04 B31B70/004
European class:	B31B19/60 B65C5/04 L31B219/29
US class:	156/521 156/522
	Classification Explorer
Cited documents:	US2878953 A, US2874499 A, US2747757 A, US2678748 A, US2639256 A, US2606681 A, US2543220 A, US2291280 A, US2062280 A,
Forward Citations:	US3890190,

Abstract:

Source: GB932682A 932,682. Making **bags**. BEMIS BROS. **BAG** CO. July 21, 1961 [Aug. 8, 1960], No 26495/61. Class 94(2). In a method of, and apparatus for, applying a **tag** T to a **bag** B, Fig. 9, having a single thread unravelable stitch type **closure** 21 at one end, the stitching being unravelable by pulling one end of the thread, the **bags** are fed in succession over a table 1, Fig. 1, by two endless chains 5 to means 31 which supply a **tab** to each **bag** and to means 157 which adhere the **tabs** over the said one end of the thread. Each **bag** is placed on the table with its previously taped and sewn end contiguous to a guide 15, and with the end 25 of the **closure** tape which includes the said end of the thread rearward; the **bags** are pushed forward by lugs on the chains, and as each **bag** approaches the **tab** supplying and adhering sections it is urged against the guide 15 by an endless belt 17 extending through a slot in the table top. Simultaneously with the feed of the **bags** a strip S, Fig. 3, of **tab** material is pulled from a roll R and fed between a pair of feed rollers 45, 53, a pair of rolls 61, 67 which provide transverse lines of perforations in the strip at locations spaced by a distance corresponding to the length of a **tab**, and feed rolls 75, 77. The **tab**, which has adhesive on its lower side, is heat **sealed** to the tape 25 by being supplied to the nip of a driven wheel 135, Figs. 3 and 7, and a lobe part 159 of a vertically movable and rotatably driven sector 157. Since the latter is being driven at a peripheral speed corresponding to that of the **bags** and the strip S has a considerably lower speed, a portion of the strip is torn off at a transverse line of perforations and pressed on to the end tape. The sector 157 incorporates a heater 161 whereby the **tab** is adhered to the stitching, and the arrangement is such that a part of the **tab** projects beyond the end of the tape. A final **sealing** of the **tab** is effected by further heated **sealing** wheels 203, 205 which bear on wheels 131, 133 respectively, and between which the ends of the **bags** pass. The **sealing** sector 157, Fig. 6, is thermally insulated from its shaft 153 by a disc 171 of insulating material, and this sector is carried on a yoke 145 pivotally mounted about a shaft 139. An air cylinder 173 may raise the sector away from the wheel 129 to prevent overheating of the **bags** and c. on shut-down of the apparatus. The heat **sealing** wheels 203, 205 are mounted on yokes 187, 189 pivoted about a shaft 141 and urged upwardly by air cylinders 219 away from wheels 131 and 133 on shut-down of the apparatus. The heater of the first **sealing** sector, and those on the wheels 203, 205 are fed electrically by connections extending through their hollow supporting shafts and leading from commutators supplied by brushes. The strip feed rollers and their shafts are supported by spaced transverse plates 33 and 41 and the drive thereto is taken from a main drive shaft 89 via a chain and sprocket drive 95. The heat **sealing** assembly is carried on a base plate 113 with side plates 115, 117; the shafts of the heat **sealing** wheels extend through the side plates and the drive thereto is by a drum and sprocket drive 223.



135) Family number: 1089116 (US3751629A)

Title: SURFACE HEATING DEVICE

Priority: US19580749554 19580718 US19630301488 19630812 US19710122495 19710309 US19660607601 19661230 US19730363263 19730523

Family:

Publication number	Publication date	Application number	Application date
US3100711 A	19630813	US19580749554	19580718
US3296415 A	19670103	US19630301488	19630812
US3573430 A	19710406	US19660607601	19661230
US3751629 A	19730807	US19710122495	19710309
US3829654 A	19740813	US19730363263	19730523

Probable Assignee: EISLER P

Assignee(s):(std)**:** EISLER P ; EISLER PAUL ; PAUL EISLER

Assignee(s): EISLER P GB

Inventor(s):(std)**:** PAUL EISLER ; EISLER P ; EISLER PAUL

Inventor(s): EISLER P GB

International class (IPC 8-9): A47J36/02 A47J36/24 A47J39/00 B65D81/34 F24C7/00 H05B3/00 H05B3/06 H05B3/12 H05B3/14 H05B3/26 H05B3/58 (Advanced/Invention);
A47J36/02 A47J36/24 B65D81/34 H05B3/00 H05B3/22 H05B3/54 (Core/Invention)

International class (IPC 1-7): B65D81/34 F24C7/00 F27D11/00 F27D11/02 H05B3/00 H05B3/06 H05B3/28 H05B3/34 H05B3/58

CPC: A47J36/022 A47J39/006 F24C7/00 H05B3/06 H05B3/12 H05B3/146 H05B3/00 H05B3/26 H05B3/56 A47J36/2483 B65D81/3476 H05B3/565 Y10T428/24273

European class: A47J36/02B A47J36/24Q A47J39/00B B65D81/34R F24C7/00 H05B3/00 H05B3/06 H05B3/12 H05B3/14P H05B3/26 H05B3/56 H05B3/56A

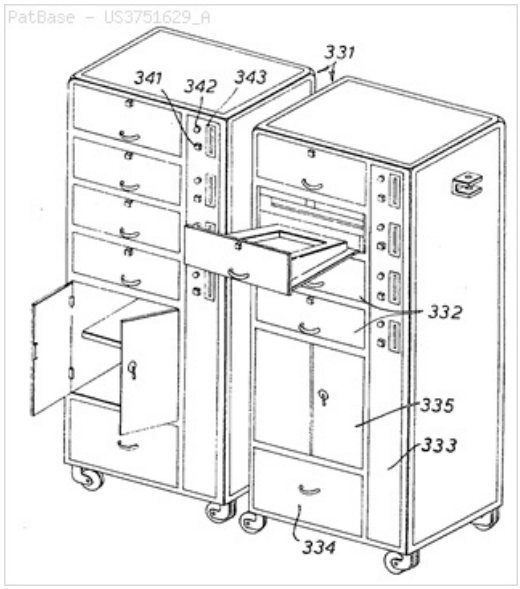
US class: 219/20.1 219/201 219/243 219/38.6 219/385 219/386 219/405 219/411 219/437 219/438 219/521 219/523 219/528 219/538 219/548 219/549 219/771 392/338 392/418 392/444 392/448 426/106 426/107 426/113 426/115 426/243 426/87 428/131

Classification Explorer

Cited documents: US3210199 A, US3132029 A, US3079913 A, US3062663 A, US2990286 A, US2935930 A, US2879367 A, US2850391 A, US2844695 A, US2834686 A, US2781119 A, US2768086 A, US2767100 A, US2764664 A, US2759830 A, US2747977 A, US2737571 A, US2724674 A, US2696776 A, US2688582 A, US2682596 A, US2671731 A, US2573972 A, US257314 A, US2532014 A, US2522810 A, US2474390 A, US2307231 A, US2235209 A, AU153046 A1,

Forward Citations: WO9405136, WO8600489, WO13186060, WO13133805, WO11163217, WO04107818, WO04107815, WO0171263, USRE45789, USRE40290, USD463214, US9815607, US9795287, US9565918, US9560907, US9505542, US9468333, US9326498, US9271596, US9211030, US9132951, US9114218, US9081886, US8857073, US8809751, US8680439, US8674271, US8546733, US8523082, US8445819, US8410407, US8404292, US8338756, US8319159, US8309891, US8308074, US8291612, US8258440, US8227727, US8203105, US8096231, US8091472, US8076613, US7903957, US7858906, US7854387, US7767939, US7767936, US7569795, US7560667, US7459657, US7446282, US7441714, US7375308, US7328654, US7256374, US7227102, US7211772, US7128789, US7115844, US7113696, US7113696, US7111853, US7105779, US6884451, US6878391, US6870135, US6813896, US6748646, US6744978, US6675603, US6673158, US6637322, US6607766, US6586111, US6541744, US6541739, US6539171, US6534174, US6519835, US6516142, US6489594, US6434328, US6433317, US6432344, US6412403, US6392208, US6392206, US6391469, US6376803, US6297475, US6263158, US6262394, US6215102, US6209447, US6188051, US6184495, US6175099, US6127660, US6054691, US5981911, US5945024, US5900173, US5783803, US5782361, US5770840, US5481090, US5247157, US5182438, US5128522, US4933534, US4873101, US4865854, US4714820, US4603052, US4496594, US4484061, US4390551, US4256950, US4177719, US4173823, US4172903, US4154860, US4138504, US4134004, US4103736, US4071736, US4068115, US4065660, US4063068, US4055745, US4044593, US3974358, US3968348, US3924100, US3919441, US3904778, US3890484, US3886346, US3878361, US3872281, US3864544, US3863048, US3855453, US3805018, US3771433, US3763350, US3740529, US3721803, US3719914, US3666921, US3619214, US3539772, US3516218, US3483358, US3392033, US3342977, US3263307, US3210199, US2015366323, US2015366320, US2015237843, US2015157190, US2015021309, US2014290124, US2014231403, US2013178977, US2012304484, US2012079699, US2012060407, US2011114629, US2010312313, US2010312200, US2010308490, US2010308033, US2010224622, US2010140252, US2010140251, US2010012643, US2009266244, US2009200285, US2009199725, US2009179022, US2009096335, US2008302778, US2008290184, US2008272199, US2008210679, US2008152937, US2008135564, US2008092753, US2008083725, US2008023462, US2007237867, US2007210051, US2007164015, US2007108190, US2007090103, US2007089318, US2007084936, US2007031547, US2006289016, US2006231547, US2006201933, US2006185527, US2006091128, US2006086361, US2006055135, US2005255208, US2005252911, US2005098684, US2005082280, US2004155023, US2004139860, US2004069155, US2004020915, US2003168153, US2003118706, US2002102337, US2002100756, US2002094361, US2002040901, US2002038801, FR2633816, FR2509263, FR2417233, FR2277531, EP2674082, EP1973383, EP1629696, EP1629695, EP1580145, DE2935940, DE2611838, DE19938612, AU727679, AU727679, AU2013276796,

Abstract:
Source: US3751629A A **dispensible** **container** constructed for a single use incorporates a thin low voltage heating film with terminals accessible from outside and **opening** means permitting access to its contents is used as a **package** for a substance adapted to be heated and plastic in the sense of being sufficiently mobile to be removed from the **container** as soon as it has been sufficiently heated. The outer portion of the **package** may comprise means for directing most of the heat inside the **package** to heat the substance and its side walls may be stiffened by a stiff frame of light weight material of the stressed skin type.


PatBase - US3751629_A
331
341
342
343
332
335
333
334

136) Family number: 22816504 (US3162032A)

Title: DRY CLEANING MACHINE

Priority: FR19620911017 19621002 US19610142632 19611003 US19610142863 19611004 US19610142633 19611003 US19610142835 19611004

Family:

Publication number	Publication date	Application number	Application date
BE623069 A	00000000		00000000
DE1460203 A1	19720406	DE19621460203	19621002
DK109317 C	19680416	DK19620004283	19621003
FR1340369 A	19631018	FR19620911017	19621002
GB1025081 A	19660406	GB19620036610	19620926
GB1025082 A	19660406	GB19650036807	19620926
GB1025083 A	19660406	GB19650036808	19620926
GB1025084 A	19660406	GB19650036809	19620926
NL135382 C	00000000		00000000
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US3103112 A	19630910	US19610142835	19611004
US3106831 A	19631015	US19610142632	19611003
US3161481 A	19641215	US19610142863	19611004
US3162032 A	19641222	US19610142633	19611003

Probable Assignee: BORG WARNER

Assignee(s):(std)**:** BORG WARNER ; FEDDERS CORP ; JAMES DONALD ROBBINS ; JAMES D ROBBINS

Assignee(s): BORG WARNER CORP

Inventor(s):(std)**:** ROBBINS JAMES D ; H GEIBEL EMMETT ; GEIBEL EMMETT H ; EDWARDS JAMES D ; E BEHRENS CURTIS ; BEHRENS CURTIS E

International class (IPC 8-9): A47L15/48 D06C7/00 D06F23/02 D06F39/08 D06F43/02 D06F43/08 D06F58/00 D06F58/04 H01T23/00 (Advanced/Invention); A47L15/48 D06C7/00 D06F23/00 D06F39/08 D06F43/00 D06F58/00 D06F58/04 H01T23/00 (Core/Invention)

International class (IPC 1-7): B05C11/10 D06F43/08 D06F58/00 F26B21/06

CPC: D06F58/04 D06F43/081 H01T23/00 D06C7/00 D06C2700/09 D06F39/083 D06F43/02 D06F43/085 D06F43/086 Y10T137/4857 Y10T137/86187 Y10T137/86381

European class: D06C7/00 D06F23/02 D06F39/08D D06F43/02 D06F43/08B D06F43/08B4 D06F43/08D D06F58/00 D06F58/04 H01T23/00 N06C700/09

US class: 137/266 137/571 137/593 34/527 68/12.08 68/18.00F 68/18F 68/18R 68/19.2 68/207 68/208 68/27

Classification Explorer

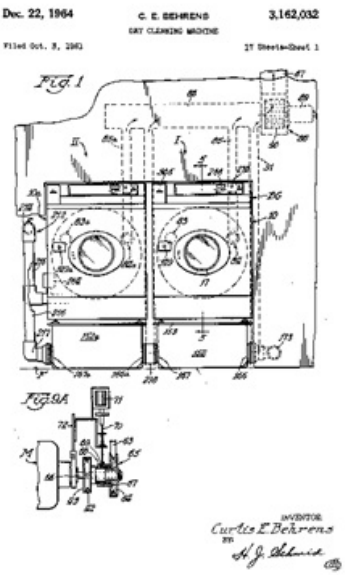
Cited documents: US890568 A, US3035428 A, US3009256 A, US2983129 A, US2970383 A, US2928267 A, US2878579 A, US2807889 A, US2733587 A, US2630694 A, US2470043 A, US2326475 A, US2130817 A, US1385724 A, US1207207 A, IT480920 A, GB847808 A, GB700634 A, FR1216431 A,

Forward Citations: WO10121942, WO07146585, USD644383, USD637369, US9903065, US9797085, US9777426, US9512554, US9347171, US9254510, US9175432, US8984767, US8863401, US8661706, US8528226, US8434180, US8272144, US8262741, US8250776, US8042284, US8042283, US8024871, US8015726, US7992322, US7992321, US7987615, US7971369, US7966684, US7958650, US7946057, US7941937, US7941936, US7926202, US7913418, US7908766, US7837741, US7765716, US7739891, US7739890, US7681419, US7637031, US7614261, US7594343, US7513132, US7308808, US3602015, US3535896, US3376654, US3360092, US3309783, US3286361, US3283548, US3254513, US3246493, US3243977, US3173766, US2015240408, US2012285035, US2012233873, US2011302967, US2011041353, US2010269266, US2010212369, US2010115790, US2010101606, US2009320320, US2009172891, US2009158616, US2009000146, US2008115540, US2008034608, US2008005924, US2007283592, US2007186438, US2007095110, US2007044518, US2006260064, US2006117808, US2005155393, US2003196277, DE2942812, DE2225399, DE102009002540, CN101818444,

Abstract:

Source: GB1025081A 1,025,081. Dry-cleaning apparatus. BORGWARNER CORPORATION. Sept. 26, 1962 [Oct. 3, 1961], No. 36610/62. Heading D1A. A closed circuit solvent supply system for one or more dry-cleaning machines I, II is shown in Fig. 3. Each machine has its own **storage** **container** 152 arranged below it but shares in a common filter and circulating system for the solvent. Solvent is supplied to the bottom of each machine through a hose 171 and rises to a level of an **opening** in the tub and overflows through a hose 164 into a lint filter 159 of the **storage** tank 152. All the tanks 152 are connected in series and solvent is extracted from them by a pump 174 through a pipe 173 and delivered to the bottom of a filter 177. The outlet pipe 178 at the top of the filter passes through a water-cooled heat exchanger 210 and through a pipe 211 to a supply manifold 213 which at its far end has an inverted U-pipe connection 212 to the **storage** tank of the end machine so that a continuous circulation of the solvent through the filter is maintained. The solvent for each machine is drawn off from the manifold 213 through pipes 221 control valves 222 and hoses 171 under gravity of the head of the U-pipe 212, an air vent pipe 219 being provided from the tanks 152 to the pipe 212. A solvent level switch 267 is adapted to be actuated if the pressure head of the solvent fails to operate warning lamps on the machines. When the filter 177 becomes blocked as indicated by a pressure gauge the pump 174 is stopped and the filter isolated from the circulating system; air under pressure is admitted to the filter to break the filter cake and soil from the filter screens which drops to the bottom of the filter. Further filter material may then be added to the system and the filter operation resumed. When required the sludge from the filter may be backwashed into a sludge tank 204. The solvent is drained from the tub after a cleaning operation by operation of the control valve 222 so that the solvent flows via hose 171 and hose 252 into the filter to tank 152. During the drying operation the condensed solvent is directed through valve 222 to a water separator before it is returned to tank 152. Each machine comprises a rotatable perforated basket 18, Fig. 5 (not shown), within a fixed tub 11 which is adapted to be rotated at low or high speed for washing with a solvent such as perchlorethylene or spin drying respectively by an electric motor M, Fig. 6 (not shown) two-speed gear T and belt drives 42, 22. The basket 18 is also adapted to be rotated slowly for a tumble dry when a heater 73 within the tub 11 and an air circulating fan 32 driven by a belt 63 are also in operation. A condenser 77 provided with cooling water is also provided in the lower part of the tub to condense the solvent vaporized during this drying operation which then drains away. Air inlet and exhaust valves 83, 84 are provided in the tub 11 to flush away solvent vapour left at the end of the drying operation through a blower and ventilating ducts. The door 17 of the tub 11 has a lock mechanism which is electrically controlled so that the door cannot be **opened** during the operating cycle of the machine. The cleaning and drying cycle of operations of each machine is started by a coin-operated mechanism and controlled automatically thereafter by a timer motor operating cams through a step-by-step mechanism to actuate sequentially switches controlling the operation of the various valves and other components of the machine. Two sub-interval timers are also provided the first of which provides a drying time delay in the event of an interruption of air flow during the dry cycle due, for example, to the fan belt being broken or loose or excessive loading of the basket. The second sub-interval timer provides a delay of the main timer during a "Pre-dry" period and "Timed dry pause" period.

PatBase - US3162032_A



Dec. 22, 1964 C. E. BEHRENS 3,162,032

DRY CLEANING MACHINE

Filed Oct. 3, 1961 17 Sheets-Sheet 1

FIG. 1

FIG. 9A

INVENTOR.
Curtis E. Behrens
BY
H. J. Behrens

137) Family number: 25557542 (US3290856A)

Title: METHOD OF **SEALING** **CONTAINERS** WITH LAMINATED **CLOSURES**

Priority: FR19620905394 19620727 FR19620905395 19620727 US19620187592 19620416 US19650438931 19650311 US19610133439 19610823

Family:

Publication number	Publication date	Application number	Application date
AT243673 B	19651125	AT19620006523	19620813
AT252113 B	19670210	AT19620006519	19620813
CH420969 A	19660915	CH19620009491	19620808
CH422499 A	19661015	CH19620009487	19620808
DK107925 C	19670717	DK19620005439	19621214
FR1338435 A	19630927	FR19620905394	19620727
FR1338436 A	19630927	FR19620905395	19620727
GB1011796 A	19651201	GB19620032267	19620822
GB1011800 A	19651201	GB19620032271	19620822
NL282414 A	00000000		00000000
US3194474 A	19650713	US19610133439	19610823
US3194479 A	19650713	US19620187592	19620416
US3290856 A	19661213	US19650438931	19650311

Probable Assignee: JAMES RIVER DELAWARE M INC

Assignee(s):(std)**:** KVP SUTHERLAND PAPER CO ; PETROLITE CORP

Assignee(s): JAMES RIVER CORP ; JAMES RIVER DELAWARE M INC ; JAMES RIVER OF VIRGINIA A CORP OF VA CORP

Inventor(s):(std)**:** RUMBERGER GEORGE G ; GEORGE G RUMBERGER

Inventor(s): G RUMBERGER GEORGE

International class (IPC 8-9): B29C65/48 B65D5/02 B65D5/10 B65D5/64 B65D65/40 B65D77/20 B65D77/22 (Advanced/Invention); B29C65/48 B65D5/02 B65D5/64 B65D65/40 B65D77/10 B65D77/22 (Core/Invention)

International class (IPC 1-7): B31B3/60 B65D3/10 B65D39/02 B65D5/26 B65D5/66 B65D53/06

CPC: B65D5/10 B65D77/2024 B29C66/112 B29C66/131 B29C66/1312 B29C66/542 B29C66/545 B29C66/723 B65D77/2056 B65D5/0227 B65D5/0263 B65D5/64 B65D65/40 B65D77/22 B65D2577/2025 B65D2577/2091 B29C66/53461 B29C66/43121 B29C65/4815 B29C66/4326 B29C66/7292 B29C65/1425 B29C65/18 B29C66/24221 B29C66/24244 B29C66/72328 B29C66/72329 B29C66/72325 B29C66/72326 B29C66/71 B29C66/612

European class: B29C65/48 B65D5/02C B65D5/02G B65D5/10 B65D5/64 B65D65/40 B65D77/20E B65D77/20E1B3B2 B65D77/22 L65D577/20L L65D577/20P2

US class: 206/459.5 229/123.2 229/125.17 229/125.34 229/125.35 229/132 229/134 229/151 229/160 229/190 229/193 229/247 229/5.84 229/5.85 493/129 493/133 493/137 493/151 53/471 53/488

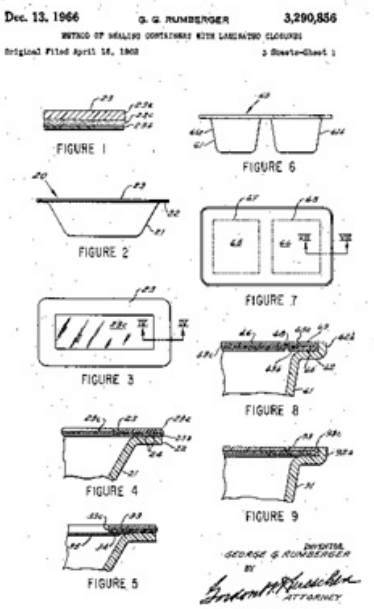
Classification Explorer

Cited documents: US3112587 A, US3079057 A, US3062432 A, US3017067 A, US3010639 A, US2940230 A, US2896387 A, US2875563 A, US2661141 A, US2550520 A, US2506056 A, US2474619 A, US2441477 A, US2415387 A, US2293589 A, US2185604 A, US2141556 A,

Forward Citations: WO9519296, WO9319986, WO9220591, WO8603174, WO8001789, WO15020727, USRE33204, US9096346, US8920744, US8403820, US8403819, US8317671, US8153214, US8033449, US7987979, US7883000, US6858250, US6626353, US6586050, US6105857, US5499730, US5265798, US5143281, US5118002, US5090616, US5057359, US4961450, US4863035, US4848649, US4771937, US4756470, US4599123, US4555027, US4124161, US4040561, US4007671, US3958056, US3900645, US3886017, US3885671, US3616962, US3460310, US3424342, US3372853, US3361328, US3344948, US3317068, US3315872, US3298593, US2015041470, US2014148322, US2011281004, US2011177214, US2009145954, US2009121005, US2009078750, US2008295932, US2008286420, US2008119343, US2007297702, US2007137771, US2006249564, US2005145683, US2005067112, US2003049371, TR29006, TR29006, JP52116401, ITMI20101463, GB2141095, GB2123786, FR2757135, FR2564780, FR2543114, EP0700838, EP0545143, EP0313356, EP0313356, EP0282344, EP0088730, EP0037101, DE4234780, DE4102021, DE19758127, AU628023,

Abstract:
Source: US3290856A 1,011,800. **Packages**. PETROLITE CORPORATION. Aug. 22, 1962 [Aug. 23, 1961; April 16, 1962], No. 32271/62. Addition to 1,011,796. Drawings to Specification. Heading B8C. [Also in Division B5] A **container** comprises a **container** body and an unarticulated **closure** member at least one of these being of the laminated sheet material of the parent Specification, the **closure** member being **sealed** to the body by the exudation of the thermoplastic adhesive from one or more avenues of exit in edge regions of the sheet material. The **container** may be a circular tub (Figs. 5-10, not shown, or a single or double compartment tray (Figs. 2-9, not shown), the **closure** member being a flat sheet of the laminate which may be provided with a transparent window by removal of a portion of the outer plies, or by providing a tearaway portion in the outer ply, the window either being formed by the adhesive layer or by a further inner film layer of glassine, regenerated cellulose, cellulose acetate vinyl, or polystyrene. A multi-**container** strip may be filled with contents and **covered** with a strip of the laminated sheet which is then cut into individual **closure** members with a heated blade which simultaneously effects the **sealing** of the **closure** members to the **containers**.

PatBase - US3290856_A



Dec. 13, 1966 G. G. RUMBERGER 3,290,856

METHOD OF SEALING CONTAINERS WITH LAMINATED CLOSURES

Original Filed April 18, 1962 2 Sheets-Sheet 1

FIGURE 1

FIGURE 6

FIGURE 2

FIGURE 7

FIGURE 3

FIGURE 8

FIGURE 4

FIGURE 9

FIGURE 5

INVENTOR.
GEORGE G. RUMBERGER
BY
ATTORNEY

138) Family number: 22653759 (US3136418A)

© PatBase

Title: STERILE **PACKAGE**

Priority: US19610117014 19610614

Family:

Publication number	Publication date	Application number	Application date
AU1798462 A1	19631128	AU19620017984	19620522
GB946896 A	19640115	GB19620022923	19620614
US3136418 A	19640609	US19610117014	19610614

Probable Assignee: ETHICON INC

Assignee(s):(std)**:** ETHICON INC

Inventor(s):(std)**:** LEROY STACY STANLEY ; IVAN FLOWER DAVID ; ALVIRO CALABRO FRANK

Inventor(s): STANLEY LEROY STACY DAVID IVAN FLOWER AND FRANK ALVERO CALABRO ; STACY STANLEY LEROY ; FLOWER DAVID IVAN ; CALABRO FRANK ALVIRO

International class (IPC 8-9): A61B17/02 A61B17/04 A61B17/06 B65D75/38 B65D75/58 B65D75/60 B65D85/24
D05B85/00 (Advanced/Invention);
B65D75/32 (Advanced/Non-invention);
A61B17/06 B65D75/52 D05B85/00 (Core/Invention);
B65D75/28 (Core/Non-invention)

International class (IPC 1-7): A61F15/00

CPC: A61B17/06138 B65D75/32 B65D75/5805 D05B85/00

European class: A61B17/06P4F B65D75/58B D05B85/00 L65D75/32

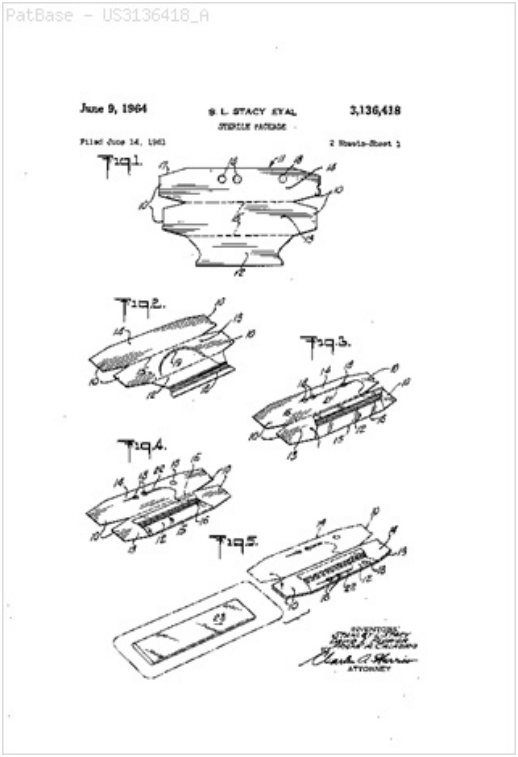
US class: 206/63.3

Classification Explorer

Cited documents: US2993589 A, US2868371 A, US2831572 A, US2692676 A, US2417574 A, US1914836 A, US1491088 A, SE173846 C1, CH340948 A,

Forward Citations: WO0200120, US9675341, US8408394, US7967134, US7861861, US7520383, US7137507, US6409016, US5819918, US5669490, US5584164, US5560477, US5503266, US5461844, US5435438, US5390782, US5386912, US5358102, US5351822, US5348146, US5341622, US5277299, US5271494, US5249672, US5236082, US5197597, US5127518, US5123528, US4491218, US4369880, US3959947, US3951261, US3869044, US3811564, US3779375, US3363751, US3319782, US2011083993, US2010230300, US2009230002, US2008245790, US2005175133, US2004084331, GB2379204, GB2379204, EP0557059, EP0557022, DE2536924,

Abstract:
Source: GB946896A 946,896. Laminates. ETHICON Inc. June 14, 1962 [June 14, 1961], No. 22923/62. Drawings to Specification. Heading B5N. [Also in Division B8] A suture **package** (see Division B8) closed by heat-**sealing** is formed from a laminated sheet material, e.g. aluminium foil laminated with a heat-**sealable** plastics material such as a vinyl chloride-vinyl acetate copolymer, or paper laminated to P.V.C. The foil/plastics laminate may be made with the aid of an adhesive such as a butediene-acrylonitrile copolymer.



139) Family number: 25241389 (US3687356A)

Title: GUSSETED TYPE **BAGS**

Priority: FR19630922641 19630125 US19620169287 19620129 US19740449489 19740308 US19720257253 19720526 US19650467416 19650628 US19720228255 19720222 US19740449490 19740308

Family:

Publication number	Publication date	Application number	Application date
AT239703 B	19650426	AT19630000549	19630124
BE627372 A	19680814		19650902
CH464780 A	19681031	CH19630000997	19630128
DE1486577 A1	19690116	DE19631486577	19630118
DE1536235 A1	19700108	DE19661536235	19660603
DK103161 C	19651122	DK19630000397	19630128
FR1345471 A	19631206	FR19630922641	19630125
GB1002202 A	19650825	GB19630001107	19630110
NL6814033 A	19681227	NL19680014033	19681001
SE308656 B	19690217	SE19630000903	19630128
US3687356 A	19720829	US19650467416	19650628
US3776451 A	19731204	US19720257253	19720526
US4008850 A	19770222	US19720228255	19720222
USRE28317 E	19750128	US19740449489	19740308
USRE28318 E	19750128	US19740449490	19740308

Probable Assignee: STONE CONTAINER CORP

Assignee(s):(std)**:** ST REGIS PAPER CO ; ST REGIS PAPER CO A CORP

Assignee(s): ST REGIS PAPER CO A OF STATE CORP ; ST REGIS PAPER CO A OF STATE OF NEW YORK CORP ; ST REGIS PAPER CO US ; STONE BROWN PAPER INC ; STONE BROWN PAPER INC A CORP OF ; STONE CONTAINER CORP ; CHAMPION INT ; CHAMPION INT CORP

Inventor(s):(std)**:** GOODRICH J ; WAXLAX C ; WAXLAX CHESTER E ; JOSEPH GOODRICH JOHN ; GOODRICH JOHN J ; EDWIN WAXLAX CHESTER ; JOHN JOSEPH GOODRICH

Inventor(s): CHESTER E WAXLAX ; GOODRICH J US ; JOHN J GOODRICH ; WAXLAX C US

International class (IPC 8-9): B65D30/00 B65D30/08 B65D30/20 (Advanced/Invention); B65D30/00 B65D30/08 B65D30/10 (Core/Invention)

International class (IPC 1-7): B31B B65D31/00 B65D31/02 B65D31/08 B65D31/10 B65D33/02 B65D33/18 B65D33/24

CPC: B65D31/02 B65D31/10 B65D31/00

European class: B65D31/00 B65D31/02 B65D31/10

US class: 229/55 229/58 229/62 229/66 383/109 383/113 383/116 383/85

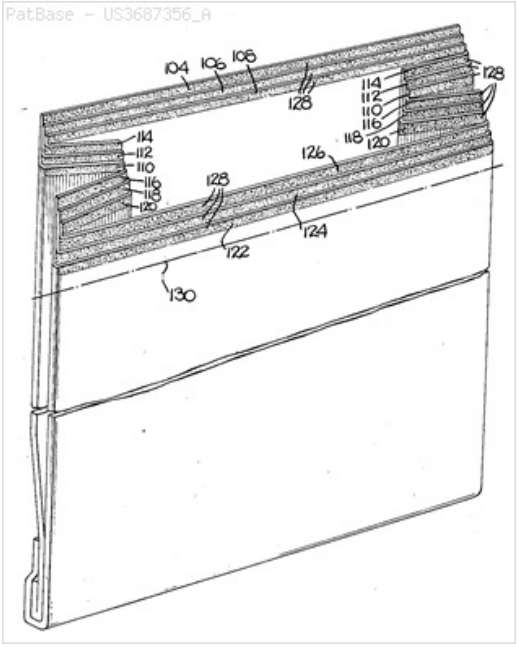
Classification Explorer

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Forward Citations: WO7900064, WO17151756, WO14116568, WO14116567, WO14081804, WO12141981, WO12040097, WO12040097, WO11133616, WO06067617, USRE28317, US9845184, US9731868, US9701457, US9669983, US9669981, US9663284, US9561883, US9346216, US9233502, US9056697, US8604399, US8568842, US8540612, US8535209, US8486500, US8475046, US8443578, US8297840, US8282539, US8241194, US8241193, US8240915, US8227062, US8104961, US6883964, US6623162, US6599016, US6367976, US6338572, US6299355, US6241390, US6095960, US6068403, US4577761, US4515273, US4480752, US4260061, US4142667, US4008850, US4003467, US3966115, US3927825, US3776451, US2017080440, US2015367983, US2015298418, US2014105523, US2014090339, US2013206631, US2012048860, US2011176753, US2011103721, US2011089168, US2011019944, US2010293897, US2010266223, US2010247001, US2010221464, US2010192520, US2010189380, US2010158418, US2010158417, US2010154362, US2010150479, US2010098355, US2010029455, US2009324894, US2009324143, US2009159192, US2009021466, US2008302067, US2008292223, US2008187695, US2007047853, US2007047852, US2007042146, US2006045392, US2004105600, US2003179960, ITMI20121397, GB2478282, GB2478282, GB2324995, EP3002066, EP2616349, EP1228857, EP1228857, EP0947437, EP0273106, EP0043556, EP0043556, DE29803096, DE2856956,

Abstract:
Source: US3687356A A **bag** of tubular form comprising a plurality of contiguous plies of flexible sheet material, said **bag** having a front surface and an oppositely disposed rear surface adapted to overlap said front surface at one end of said tube when said **bag** is in its assembled condition, said **bag** being longitudinally and reversely creased along diametrically opposed portions to provide a pair of oppositely disposed gussets interposed between said front and rear surfaces, each of said gussets having a front portion and a stepped rear portion adapted to overlap said front portion within the overlap area of said front and rear surfaces at said end of the tube when said **bag** is in its assembled condition, and with the **bag** plies extending progressively and successively one beyond another at each surface portion at said **bag** end, and a bonding agent in a dormant state being applied on each surface portion at said **bag** end, and said bonding agent being reactivatable to close said **bag** subsequent to a later **bag** filling operation.

PatBase - US3687356_A



140) Family number: 29893336 (US3280236A)

Title: METHOD OF AND APPARATUS FOR MAKING PLASTIC ARTICLES

Priority: CH19630014987 19631207 FR19620912232 19621015 FR19630939026 19630621 US19620204526 19620622 US19620194401 19620514 US19610146686 19611017 US19620209723 19620713 US19630255856 19630204

Family:

Publication number	Publication date	Application number	Application date
AU2313962 A1	19640416	AU19620023139	19621012
AU3050963 A1	19641112	AU19630030509	19630509
CH431030 A	19670228	CH19630014987	19631207
DE1479542 A1	19690508	DE19621479542	19621016
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FR1361050 A	19640515	FR19630939026	19630621
FR1363461 A	19640612	FR19630934574	19630513
GB1024132 A	19660330	GB19620039062	19621016
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US3170971 A	19650223	US19620204526	19620622
US3172929 A	19650309	US19640346877	19640224
US3244778 A	19660405	US19620194401	19620514
US3247304 A	19660419	US19620209723	19620713
US3280236 A	19661018	US19630255856	19630204

Probable Assignee: OWENS ILLINOIS GLASS CO

Assignee(s):(std)**:** OWENS ILLINOIS GLASS CO ; OWENS ILLINOIS INC

Assignee(s): OWENS ILLINOIS GLASS COMPANY

Inventor(s):(std)**:** D NINNEMANN LAWRENCE ; DUANE NINNEMAN LAWRENCE ; LAWRENCE DUANE NINNEMAN ; NINNEMAN LAWRENCE D ; R SANTELLI THOMAS ; SANTELLI THOMAS R ; SCALORA ANTHONY J ; THOMAS ROBERT SANTELLI

Inventor(s): THOMAS ROBERT SANTELLI AND LAWRENCE DUANE KINNEMAN ; ROBERT SANTELLI THOMAS

International class (IPC 8-9): B29C17/07 B29C45/46 B29C45/54 B29C49/02 B29C49/06 B29C49/08 (Advanced/Invention); B29C45/46 B29C45/53 B29C49/02 B29C49/06 B29C49/08 (Core/Invention)

International class (IPC 1-7): B29C17/00 B29C17/07 B29C5/06 B29D23/02 B29F1/00 B29F1/02

CPC: B29C49/06 B29C2043/3283 B29C2043/3618 B29C2043/3631 B29C2043/3665 B29C49/08 B29B2911/1402 B29B2911/14026 B29B2911/14033 B29B2911/1404 B29B2911/14106 B29B2911/14133 B29C45/461 B29C45/54 B29C49/02 B29K2105/253 B29C49/064

European class: B29C45/46B B29C45/54 B29C49/02 B29C49/06 B29C49/06B3 B29C49/08 L29B911/14B2B L29B911/14B2D L29B911/14B2F L29B911/14B2H L29B911/14B4L L29B911/14B4N L29C43/32B2 L29C43/36C2A L29C43/36C2E L29C43/36F L29K105/25C

US class: 264/328.19 264/529 264/537 425/145 425/525 425/529 425/533 425/535 425/558

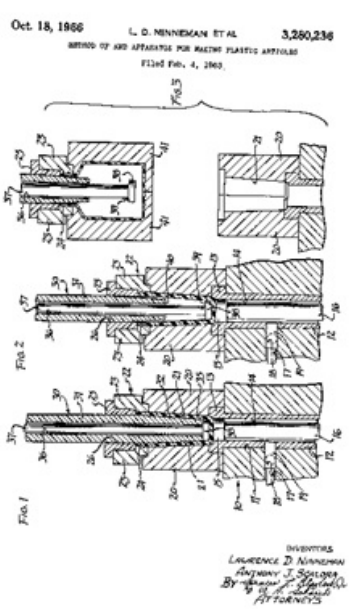
Classification Explorer

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Forward Citations: WO9207650, WO04065100, WO03091000, WO02058908, US9296136, US9044892, US8790112, US7033162, US6767497, US6045746, US5364585, US5230433, US5038454, US4818213, US4615667, US4601865, US4529372, US4426201, US4386899, US4372735, US4357296, US4334847, US4315726, US4280805, US4235837, US4206168, US4150689, US4140465, US4131411, US4080147, US3944643, US3944530, US3807924, US3537133, US3535418, US3524619, US3470282, US3441982, US3433862, US3421179, US3415916, US3412188, US3390431, US3358062, US3349155, US3347965, US3345687, US3337666, US3336425, US3330894, US3326425, US3280236, US2015158217, US2014239558, US2011175260, US2011089613, US2004137105, GB2343409, GB2343409, GB2317140, GB2260101, FR2098332, ES2391346, EP2347882, EP0454997, EP0089047, EP0072103, EP0042132, EP0012426, DK156162, AU726562,

Abstract:
Source: GB1024132A 1,024,132. Injection moulding; blow moulding. OWENS-ILLINOIS Inc. Oct. 16, 1962 [Oct. 17, 1961; July 13, 1962], No. 39062/62. Heading B5A. Hollow plastic articles are blow-moulded from stress-free hollow blanks made in an injection mould, one end wall of which is of substantially the same diameter as the injection cylinder or inlet passageway. In Fig. 1 (not shown) the hollow blank is moulded in a cavity 33 formed between a tube 30 and a mould block 21. Neck-forming segments 26 close the upper end of the cavity while the lower end is formed by the upper face of an injection piston 50. A screw-type plasticizer (Fig. 4, not shown) supplies plasticized material through a port 57 to a supply passage 55 whence it is delivered to the injection cylinder 44 by a piston 63. The moulded blank (Fig. 2, not shown) is transferred with the tube 30 and neck segments 26 to a blow mould (Fig. 3, not shown) and blown by means of air admitted through the annular space between the tube 31 and a valve element 35 which is displaced downwardly for this purpose. Cooling passages or resistance heaters may be provided in the mould block 21, neck segments 26, tube 30 and/or piston 50. The injection cylinder 44 may be horizontal instead of vertical. In a modification seen in Figs. 5 to 7 (not shown) the mould block 21 of Fig. 1 is eliminated, the outer wall of the mould being a continuation of the injection cylinder. Removal of the moulded blank from the mould is facilitated by further upward movement of the injection piston. Figs. 8 to 10 (not shown) show a modification in which the blow tube 95 is tapered at its lower end and may be withdrawn to the position shown before the blank is transferred to the blow mould. In Figs. 11 to 13 (not shown) a solid mandrel 105 is used in place of the blow tube, a separate blow tube 111 being inserted through the neck when the hollow blank has been introduced into the blow mould. Fig. 22 (not shown) shows a complete machine for carrying out the injection and blow moulding. The blank is first injection moulded in a mould 310 comprising two portions slidably mounted on horizontal guide rods 316 (Fig. 36, not shown). These mould portions are **opened** and closed by fluid pressure cylinders 320. Mounted above the mould 310 is the blow mould comprising segments 340 carried on pivoted links 341, 342 (Fig. 38, not shown). The blow mould segments are **opened** and closed by fluid pressure cylinders 350 connected thereto by rods 351. The apparatus also includes a main cross head 243 (Figs. 22, 33) and a neck mould cross head 235 adapted to be reciprocated vertically on guide rods 244 by a cylinder 245 carried by cross members 246 and frame members 212. The crossheads 243, 245 travel together whereas an intermediate or core crosshead 250 is actuated independently by means of cylinders 252. The crosshead 250 carries a core pin 255, the lower end of which carries a valve controlling the supply of blowing air. The crosshead 235 carries cylinders 238 for operating complementary neck mould segments 241. Operation of the machine is controlled automatically by'an hydraulic control system seen in Figs. 39, 40 (not shown), a pneumatic system in Fig. 41 (not shown), and an electric control system seen in Figs. 30, 31 (not shown). The Specification also includes the subjectmatter of the Specification 1,024,133.

PatBase - US3280236_A



Oct. 18, 1966 L. D. NENNEMAN ET AL 3,280,236

METHOD OF AND APPARATUS FOR MAKING PLASTIC ARTICLES

Filed Feb. 4, 1963

Fig. 1

Fig. 2

INVENTORS
LAWRENCE D. NENNEMAN
ANTHONY J. SOSLOWSKI
BY
ATTORNEYS

141) Family number: 25126620 (US3220636A)

Title: CLOSURE STRUCTURE FOR THERMOPLASTIC BAG

Priority: FR19630953023 19631107 US19620236495 19621109 US19630280689 19630515

Family:

Publication number	Publication date	Application number	Application date
CH426613 A	19661215	CH19630013761	19631108
ES293311 A1	19640201	ES19630293311	19631108
FR1382307 A	19641218	FR19630953023	19631107
GB1067881 A	19670503	GB19630041620	19631022
LU44767 A	19650507		19631107
US3220635 A	19651130	US19620236495	19621109
US3220636 A	19651130	US19630280689	19630515

Probable Assignee: UNION CARBIDE CORP

Assignee(s):(std)**:** UNION CARBIDE CORP

Inventor(s):(std)**:** KASTING HOWARD E ; JOHN PETER SACHS ; HOWARD EDWARD KASTING ; SACHS JOHN P

Inventor(s): PETER SACHS JOHN ; EDWARD KASTING HOWARD

International class (IPC 8-9): B65D30/18 B65D30/24 (Advanced/Invention); B65D30/10 B65D30/24 (Core/Invention)

International class (IPC 1-7): B29C24/00 B65D31/00 B65D31/08 B65D31/14 B65D75/46

CPC: B65D31/142 B65D31/08

European class: B65D31/08 B65D31/14A

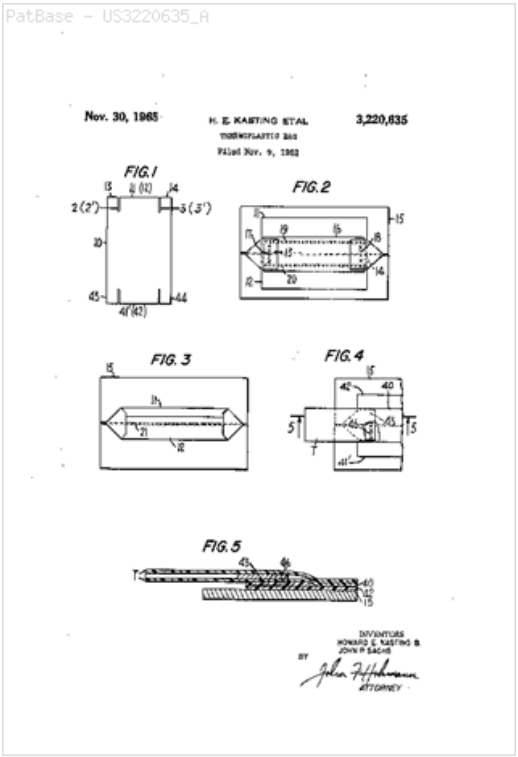
US class: 383/126 383/54

Classification Explorer

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Forward Citations: USD717162, USD703547, USD680426, USD671012, USD653495, US9815607, US9676539, US9505542, US9211030, US9132951, US9079704, US9027825, US8887918, US8866056, US8850964, US8735786, US8729437, US8613249, US8610039, US8302528, US6396036, US5079083, US5006405, US4946743, US4765999, US4716061, US4705707, US4453270, US4382538, US3979049, US3439864, US3378190, US3297234, US3291376, FR2415053,

Abstract:
Source: GB1067881A 1,067,881. Block bottom bags. UNION CARBIDE CORPORATION. Oct. 22, 1963 [Nov. 9, 1962; May 15, 1963], No. 41620/63. Heading B8K. The heat-sealed block bottom of a thermoplastic bag includes a separate membrane 16 of thermoplastic film heat-sealed in overlapping relation to infolded portions or tabs on each of one pair of opposed side walls of the bag, and either the membrane is heat-sealed to at least one of the other pair of side walls or to a flap thereon, or there are flaps on said other pair of side walls which flaps are inwardly folded and heat-sealed to each other. In one embodiment the bag bottom comprises side flaps 11, 12 and end tabs 13, 14 formed by slitting a tubular blank (Fig. 1, not shown), and these are infolded and outfolded respectively against a split platen 15 as in Fig. 2. The membrane 16 is then applied under the tabs 13, 14 and heat-sealed thereto and to the bag walls adjacent flaps 11, 12 by seals 17-20. Flaps 11, 12 are folded over and sealed longitudinally to provide a handhold. Side flaps 11, 12 may be dispensed with or made just large enough to fold over seals 19 and 20. Alternatively seals 19 and 20 may be eliminated and the flaps, which in this case overlap fully are sealed across their side edges (Fig. 5a, not shown). In another embodiment, tabs 13, 14 cover more of the bag bottom and the membrane 16 is smaller. In a further embodiment, Fig. 6, tabs 13, 14 are cut out, and triangular extensions on the membrane 16 are sealed at 61 and 62 to the bag walls. In any embodiment the top of the bag may be closed in a similar manner to the bottom and may include a membrane which has a tubular extension forming a valve. If no valve member is included the top of the bag is closed after filling by tape, sewing, or adhesive.



142) Family number: 22825295 (US3207049A)

Title:	MACHINE FOR FORMING PLASTIC COATED PAPERBOARD **CONTAINERS** AND ERECTING AND DELIVERINGMEANS THEREFOR
Priority:	US19600067842 19601107 US19630303699 19630703

Family:

Publication number	Publication date	Application number	Application date
DE1299516 B	19690717	DE1961E028605	19611107
DE1786440 A1	19701105	DE19611786440	19611107
DE1786440 B2	19741107	DE19611786440	19611107
DE1786440 C3	19750626	DE19611786440	19611107
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GB1001597 A	19650818	GB19650000552	19611106
GB1001598 A	19650818	GB19650000553	19611106
GB1001599 A	19650818	GB19650000554	19611106
US3120089 A	19640204	US19600067842	19601107
US3207049 A	19650921	US19630303699	19630703

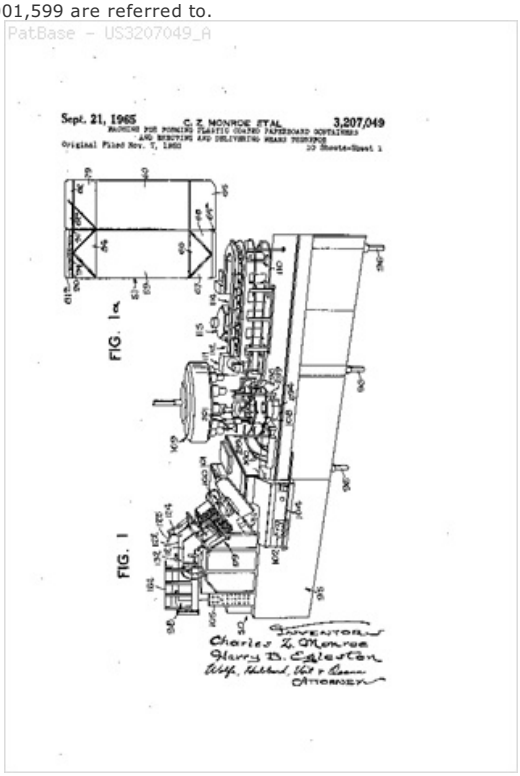
Probable Assignee:	EX CELL O CORP
Assignee(s):(std)**:**	EX CELL O CORP
Assignee(s):	EX CELL O CORP DETROIT MICH V ST A
Inventor(s):(std)**:**	B EGLESTON HARRY ; Z MONROE CHARLES ; MONROE CHARLES Z ; EGLESTON HARRY B
International class (IPC 8-9):	B29C65/00 B29C65/78 B31B3/28 B31B5/74 B65B3/02 B65B43/14 B65B43/24 B65B51/20 B65B7/18 (Advanced/Invention); B29C65/00 B29C65/78 B31B3/00 B31B5/00 B65B3/00 B65B43/00 B65B43/24 B65B51/20 B65B7/16 (Core/Invention)
International class (IPC 1-7):	B31B3/26 B31B5/26 B65B1/02 B65B3/02 B65B35/02 B65B43/24 B65B43/26 B65B51/10 B65B51/20 B65B7/18
CPC:	B29C66/431 B29C66/43122 B29C66/4322 B65B7/18 B65B43/145 B65B43/24 B29C65/10 B29C65/4815 B29C65/7882 B29C66/87441 B65B3/025 B65B51/20 B29C66/71 B29L2031/7166 B29C66/49 B29C66/0242 B31B50/004 B31B50/322 B31B50/52 B31B50/28 B31B50/64 B29C66/1122
European class:	B29C65/78M6B B29C66/024 B29C66/87441 B31B1/28 B31B1/52 B31B1/64 B31B3/00 B65B3/02C B65B43/14C B65B43/24 B65B51/20 B65B7/18 L31B201/26A L31B201/26A1A1 L31B201/26D L31B201/29 L31B201/60C
US class:	156/497 156/498 192/150 493/135 493/141 493/164 53/370.9 53/371.8 53/381.1 53/565

Classification Explorer

Cited documents:	US2957289 A, US2909875 A, US2901076 A, US2896520 A, US2869300 A, US2844927 A, US2757498 A, US2737090 A, US2726498 A, US2720394 A, US2699712 A, US2651898 A, US2642285 A, US2630958 A, US2626495 A, US2410587 A, US2245193 A, US2144283 A, US2056330 A, GB529201 A, CH155285 A, BE567723 A,
Forward Citations:	WO9609963, WO9609961, WO9609959, WO8000950, WO17036817, WO16146342, WO14166932, WO12039955, WO12039955, WO06064225, WO06064225, WO03033357, WO0044619, US9901172, US8840534, US8500946, US6837029, US6669614, US6357203, US6101786, US6042527, US5980440, US5605030, US5588279, US5562795, US5555708, US5517801, US5469690, US5214905, US5083702, US5027585, US4872562, US4869373, US4869372, US4861328, US4813548, US4813547, US4792048, US4776830, US4762234, US4756426, US4712727, US4448013, US4448008, US3999469, US3845607, US3762131, US3699743, US3602106, US3599391, US3580143, US3566762, US3456419, US3439590, US3416411, US3408906, US3405505, US3392458, US3370515, US3370399, US3364826, US3335644, US3331293, US3314216, US3306422, US3280531, US3236160, US2011209440, US2007065662, US2004079054, JP61035106, JP56169503, GB2121754, EP1838601, EP0968922, EP0832732, EP0832732, EP0781229, EP0727352, EP0698555, EP0417864, DE1270476, DE10358750, DE10358750, DE102015114380, DE102015104102, CN105102206,

Abstract:
Source: GB1001596A 1,001,596. **Packaging** machines; cartons. EX-CELL-O CORPORATION. Nov. 6, 1961 [Nov. 7, 1960], No. 39597/61. Headings B8C and B8P. [Also in Division B5] Machine for forming filled cartons.-In a machine for setting up and filling initially openended collapsed tubular carbons formed from thermoplastic coated blanks of paperboard and in which a drive connected to the bottom forming means and a second drive connected to the top folding, closing and discharge means are normally coupled together for operation in unison, means are provided for uncoupling the drives, in the event of stoppage of the first, so that the second may operate independently. Carton type.-The carton blank prior to tubing and collapsing is as shown in Fig. 7 and is coated on both sides with the thermoplastic material, e.g. polyethylene. It is erected by the machine to form a gable-topped carton (Fig. 21). A non-adhesive strip 94 provides a weakened top seam to facilitate **opening** to form a spout. Blank loading and magazine.-A supply of the collapsed cartons is placed on a tray 124 (Fig. 1) which is then inverted to deposit these, top **closure** flaps downwards, on to a conveyer in the magazine loader 98. When the supply of blanks in the magazine 99 dwindles below a certain point a switch 134, in series with a switch 132 sensing blanks in the loader, advances the conveyer to feed more blanks to the magazine. The blanks are supported in the magazine of a skid 117 between rails 116 and against end abutments 120 (Fig. 9). The lower blank is removed by a suction cup 136 fixed to a swinging arm 135, and erects as it is pulled past a fixed guide 138. The erected blank is stripped on to a mandrel 141 by a dog 140 (Fig. 10) on a chain 139 when suction is withdrawn. Bottom forming.-The mandrel wheel (Fig. 10) rotates intermittently in a vertical plane below the magazine and the mandrels are water cooled to prevent the heated blanks adhering to them. At the bottom flap crease breaker 144, blades 175, 176 reciprocating towards the carton fold panels 64, 65 downwards (Fig. 11). Fingers 178, 179 (Fig. 11) are swung about axes 182, 184 to fold panels 66, 69 inwards. At stations 145-147 warm air is supplied to heads 212 (see also Fig. 14) to activate the thermoplastic coating on the bottom **closure** panels. The relative amounts of air supplied through walls 215-217 may be regulated by baffles 220. In the event of a stoppage of part of the machine the temperature and flow of air may be reduced or stopped, automatically. At the closing station 148 a reciprocating block 235 closes the bottom panels before **sealing**. The surface of the block is of shallow V form, with one surface undercut 238 so that panel 64 is tucked-in under panel 65. Guide rails 241, 264 ensure that the bottom remains closed as it continues its movement. At **sealing** stations 149, 150, pivotally mounted cooled pads 251 are urged against the mandrel to effect **sealing**. Cartons are stripped from the mandrel at the next station by an arm reciprocating on rod 269 and deposited in the preferred arrangement in receptacles 282 (Fig. 4b) on a conveyer 280 for passage of their **open** ends in front of a sterilizing lamp 284. The stripper co-operates with means for ejecting a sterilized carton from a receptacle 282. The sterilized carton is pushed from the receptacle into the basket 285 of an uprighting transfer arm means 300 just prior to the stripped carton entering it. An arm 291 swings the basket 285 from a horizontal to an upright position, and presents the carton to a rotary top crease breaker mechanism 108 (Fig. 1). The sterilizing **unit** may be omitted and the cartons stripped from the mandrels directly into the basket 285, motion of the carton through the machine is henceforth continuous. Top pre-forming and filling.-The cartons are carried in receptacles beneath a rotating head from which depend crease-breaking means, one for each receptacle. The breakers carry two generally triangular blades 306 (Fig. 20) which are lowered into the top of the carton on a camoperated plunger so that knees 308 are opposite the top horizontal score line. Triangular fingers 311, 312 are then swung inwards by by means of a rack-and-pinion arrangement on the plunger (Fig. not not shown), bend the the panels 85. The cartons are then filled at a **unit** 109 (Fig. 1) (no details given), and presented to a conveyer 110 for subsequent heat **sealing**. In order to again fold in the top **closure** panels a " Steepler " **unit** 111 (Figs. 1, 23) engages the top of the carton prior

to heating. A member 330 is arranged to move parallel to itself while moving in an orbit over the cartons and applying folding pressure to the top during the lower movement of the orbit. As the member 330 is brought against the carton top, plates 331, 332 push the panels 78, 79 downwards while at the same time the central folder plate 334 pushes the panels 84, 85 (Fig. 21) inwards. Top **sealing**.-The carton is conveyed under electric heater sections 112 (a-d), Figs. 1, 25, suspended above the conveyer to activate the coating. If the machine jams, the heaters are automatically raised as a **unit** by pneumatic means 390, 391 to prevent damage to the cartons. The heaters may be hinged back from those above the conveyer for maintenance. The cartons are then conveyed so that their tops pass between water-cooled converging blades 370, 371 to close them before **sealing**. Closed cartons are received by a rotating turret 399 (Fig. 1) for final **sealing** of the top rib of the carton between pressure jaws 408, 409 (Fig. 29). A cam follower 428 engaging a fixed track 429 lowers fluid cooled jaw 409 which engages the top and one side of the carton's ribs 81a, 82a. A radial plunger 410 carrying the resiliently mounted jaw 408 is urged against the rib by a cam follower 416. A dating and delivery **unit** 441, Fig. 1, is mounted adjacent the **sealing** means, and marks the upstanding rib as it passes between a dating roller urged against a driven back-up roller (Fig. 32, not shown). Machine drive.-The main drive shaft 166, Fig. 4b, drives the mandrel wheel, top breaking means and filling **unit** while the secondary shaft 365 operating in unison with shaft 166 drives the " steepler " **unit**, heater conveyer, **sealing** and dating means. In the event of a machine stoppage the operator may disconnect the drives by a clutch 471 and operate the secondary drive separately, using motor 470, to complete processing of filled cartons. Means are provided to prevent re-starting of the machine until the drives have been re-coupled. The machine is provided with an operator's emergency stop-bar 104, and visual indicators 105, Fig. 1, of the performance of the various parts of the machine. Specifications 1,001,597, 1,001,598 and 1,001,599 are referred to.



143) Family number: 22842982 (US3121374A)

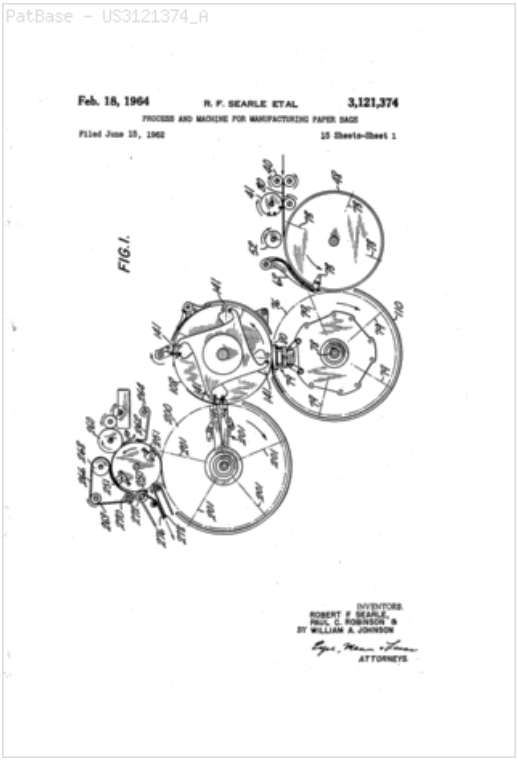
Title:	PROCESS AND MACHINE FOR MANUFACTURING PAPER **BAGS**
Priority:	US19620202912 19620615

Family:

Publication number	Publication date	Application number	Application date
US3121374 A	19640218	US19620202912	19620615

Probable Assignee:	ARKELL AND SMITHS
Assignee(s):(std):	ARKELL AND SMITHS
Inventor(s):(std):	SEARLE ROBERT F ; ROBINSON PAUL C ; JOHNSON WILLIAM A
International class (IPC 8-9):	B31B29/00 (Advanced/Invention); B31B29/00 (Core/Invention)
International class (IPC 1-7):	B31B33/26
CPC:	B31B70/024 B31B2150/00 B31B2150/0012 B31B2160/20 B31B70/00 B31B2160/10
European class:	B31B29/00 L31B219/02C1 L31B221/20 L31B221/40A
US class:	493/199 493/206 493/208 493/229 493/255 493/262
Classification Explorer	
Cited documents:	US3028294 A, US2773435 A, US2732774 A, US2353402 A, US2126920 A, US1058806 A, GB784932 A,
Forward Citations:	US3905859, US3180237,

Abstract:
Source: US3121374A (Claim 1) 1. The method of forming a **closure** in one end portion of a **bag** tube having top and bottom walls separated by a gusset wall at each side with heat fusible material at least positioned on inner surface portions of said end portion of the **bag** tube which comprises the steps of ad- 15 vancing a length of **bag** tube in the direction of its length, slitting at least one wall in said end portion to form a flap therein, gripping the flap, folding the second wall in said end portion back away from the direction of travel to form an angle between adjacent overlapped surfaces of 20 such wall and an **open** **box** with upstanding side walls, and then while the flap is held in a depressed position, collapsing the **box** by folding the opposite upstanding side walls downwardly into the interior of the **box** to bring the interior of opposite end portions of said side walls into 25 face to face contact to form an upstanding longitudinal fin and to position a portion of the inner surface of said side walls adjacent both sides of the fin in overlapping relationship with portions of tlie inner surface of the first and second mentioned walls respectiveiy, applying 30 heat and pressure to the longitudinal fin to bond the heat fusible material of opposite end portions of said side walls in the fin, and then completing the end **closure** of the **bag** tube by folding the first and second mentioned walls in said end portion inwardiy over the fin and pasting 35 them in place.

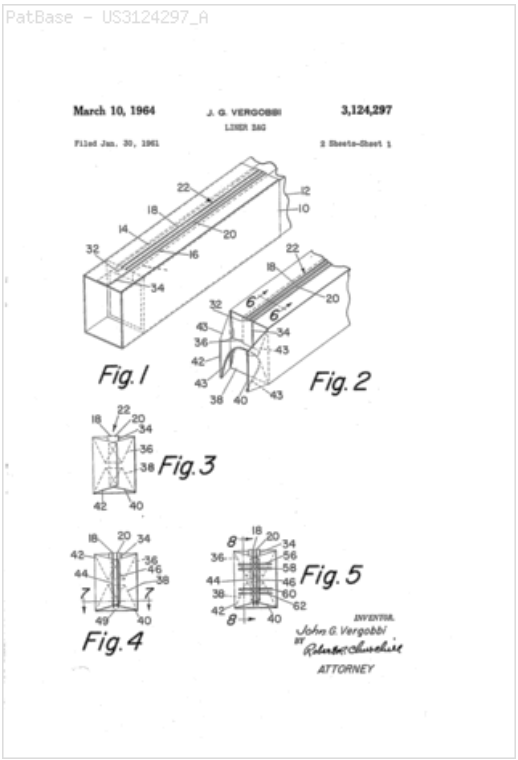


144) Family number: 22885913 (US3124297A)

Family:	Publication number	Publication date	Application number	Application date
	US3124297 A	19640310		00000000

International class (IPC 8-9):	B65D30/00 (Advanced/Invention); B65D30/00 (Core/Invention)
International class (IPC 1-7):	B65D5/28
CPC:	Y10S229/90 B65D31/00
European class:	B65D31/00
US class:	229/198.2 229/900 383/108 383/113
Classification Explorer	
Cited documents:	US2987858 A, US2982659 A, US2954116 A, US2944715 A, US2638724 A, US2326649 A,
Forward Citations:	US5209573, US5090616, US3337034, US3235169, US3220601,

Abstract:
Source: US3124297A (Claim 1) 1. A liner **bag** comprising a thermoplastic sheet of ma- along the overlapping portions of the last folded flaps terial folded to provide a rectangular tube **open** at one and which is coextensive with the side seam **seal** at one end and provided with a bottom **closure**, said **bag** hav- end being arranged to terminate short of the adjacent ing a side seam formed by overlapping marginal por- side wall of the **bag** at the other end, and the intersecttions of the sheet material heat **sealed** along two rela- ss_gt;0 jng heat **seals** being arranged to terminate short of the tively narrow spaced lines to fuse together the overlap- adjacent side walls at both ends of those heat **seals**. ping portions along said line, said **seal** lines extending to the bottom of the **bag** with the bottom end of the



145) Family number: 25248604 (US3220601A)

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Title: THERMOPLASTIC FILM **BAG**

Priority: IT19630008570 19630329 US19620198099 19620528

Family:

Publication number	Publication date	Application number	Application date
AT248948 B	19660825	AT19640001792	19640302
AT248950 B	19660825	AT19640003275	19630528
CH409766 A	19660315	CH19630006634	19630528
DE1436843 A1	19690514	DE19631436843	19630528
DE1892107 U	19640430	DE1964S047894U	19640227
DK107467 C	19670529	DK19630002515	19630527
ES298647 A1	19641101	ES19640298647	19640428
GB1041202 A	19660901	GB19630020317	19630522
LU43808 A	19641124		19630524
MY6700135 A	19671231	MY19670000135	19671231
NL6401570 A	19640625	NL19640001570	19640220
NL6911982 A	19691125	NL19690011982	19690806
US3220601 A	19651130	US19620198099	19620528

Probable Assignee: UNION CARBIDE CORP

Assignee(s):(std)**:** EDISON UNION CARBIDE CORP SOC ; SICEDISON SPA ; UNION CARBIDE CORP

Assignee(s): SOCIETA EDISON UNION CARBIDE CORP ; SICEDISON S P A

Inventor(s):(std)**:** MARIOTTONI VILFREDO ; KASTING HOWARD E ; HOWARD EDWARD KASTING ; EDWARD KASING HOWARD

Inventor(s): EDWARD KASTING HOWARD ; VILFREDO MARIOTTONI

International class (IPC 8-9): B31B29/00 B65D30/18 B65D30/24 B65D33/01 (Advanced/Invention);
B31B29/00 B65D30/10 B65D30/24 B65D33/01 (Core/Invention);
B65D (Subclass/Invention)

International class (IPC 1-7): B29C24/00 B31B31/84 B65D31/08 B65D31/14 B65D33/00 B65D33/01 B65D33/16

CPC: B65D33/01 B65D31/142 B65D31/08 B31B2150/00 B31B2160/20

European class: B65D33/01 L31B221/20

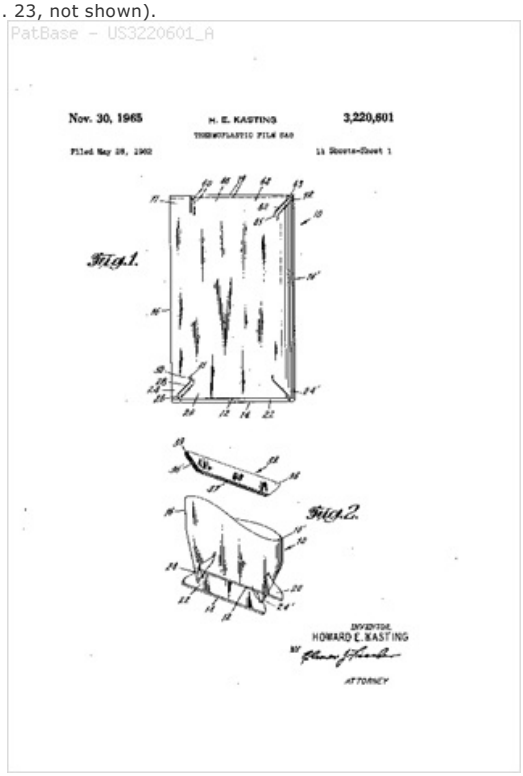
US class: 383/126 383/54

Classification Explorer

Cited documents: US3124297 A, US3004698 A, US2771010 A, US2381850 A, US2353605 A, US2305192 A, US221712 A, US1995286 A, IT401579 A,

Forward Citations: US8851752, US8833592, US8562215, US3439864, US2012199243, US2011100996, US2011099957, US2010200454,

Abstract:
Source: GB1041202A 1,041,202. Plastics valve **bags**. UNION CARBIDE CORPORATION. May 22, 1963 [May 28, 1962], No. 20317/63. Heading B8K. [Also in Division B5] A single- or multi-ply thermoplastics valve **bag** 10 (Fig. 1) has side and end bottom flaps 20, 22 and 24, 24^1 respectively defined by diagonal slits 28 terminating at their ends in slits 26, 31 parallel to the edge 16 of the **bag** blank, which flaps when folded inwardly and heat **sealed** together (see Division B5), form the **bag** bottom **closure** (Fig. 12, not shown). The side and end top flaps 64, 66 and 71, 72 respectively are formed by diagonal slits 62 terminating in slits 63, 65 and slits 60 parallel to the edge of the **bag** blank. When the end top flaps are folded inwardly, a valve sheet is heat **sealed** to the flap 71, and when the side flaps are folded inwardly a plate is placed between the flap 71 and the side flaps during heat **sealing** of the side flaps thus to form the valve of t e upper **closure** (Fig. 23, not shown).



146) Family number: 22507610 (US3131836A)

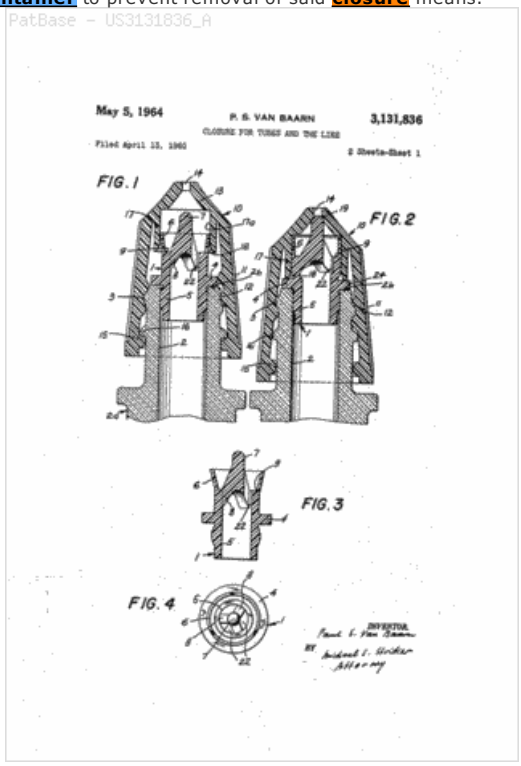
Title:	**CLOSURE** FOR TUBES AND THE LIKE
Priority:	19590513 US19600021991 19600413

Family:

Publication number	Publication date	Application number	Application date
US3131836 A	19640505	US19600021991	19600413

Probable Assignee:	RECH S DEV E R D S A ET
Assignee(s):(std):	RECH S DEV E R D S A ET
Assignee(s):	ETUDES RECHERCHES DEVELOPPEMENTS E R D S A ; ETUDES RECHERCHES DEVELOPPEMENTS ERD
Inventor(s):(std):	BAARN PAUL S VAN
International class (IPC 8-9):	B65D47/24 (Advanced/Invention); B65D47/04 (Core/Invention)
International class (IPC 1-7):	B05B1/00 B65D35/48 B65D47/20
CPC:	B65D47/242
European class:	B65D47/24A1
US class:	222/521 222/542
Classification Explorer	
Cited documents:	US3010619 A, US2838215 A, US2081585 A,
Forward Citations:	US5353970, US5310097, US5292035, US5284277, US5135140, US5101994, US4988016, US3901410, US3848779, US3844455, US3777939, US3407967, US3285453, US3283966, US3278096, US3240404, US3227332, US3221952, GB2453018, FR2604153,

Abstract:
Source: US3131836A (Claim 1) 1. A **closure** arrangement, comprising, in combination, a **container**; a **dispenser** carried by said **container** and comprising a tubular body portion communicating with said **container**, said **dispenser** further comprising at least 60 slightly deformable annular rim means connected with said body portion and flaring outwardly in a direction away from said **container**, and **sealing** means surrounded by and extending beyond said rim means, said **sealing** means and said body portion defining channel means; and 65 **closure** means surrounding and shiftable with respect to said **dispenser** toward and away from said **container**, said **closure** means comprising an end portion remote from said **container** and formed with **dispensing** orifice means **sealable** by said **sealing** means when the **closure** means 70 is shifted toward said **container**, and said orifice means being spaced from said **sealing** means to communicate with said channel means when the **closure** means is shifted away from said **container**, said **closure** means further comprising comparatively stiff annular sleeve means slid- ably receiving at least a portion of said rim means when the **closure** means is shifted toward said **container**, the dimensions of said rim means and of said sleeve means being such that the rim means is at least slightly deformed by and **sealingly** engages with said sleeve means at least when said orifice means is **sealed**, said **container** further comprising an annular rib means on the external surface thereof, and **closure** means further comprising an internal annular shoulder means, said rib means engaging said shoulder means as said **closure** means is shifted away from said **container** to prevent removal of said **closure** means.



147) Family number: 22788851 (US3200555A)

Title:	Method and apparatus for wrapping cigarette packs and the like
Priority:	DE1960H039873 19600707

Family:

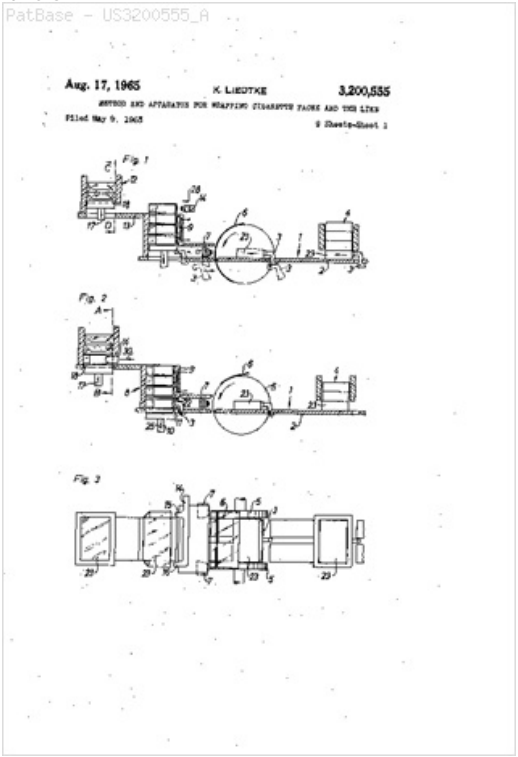
Publication number	Publication date	Application number	Application date
DE1169835 B	19640506	DE1960H039873	19600707
GB975759 A	19641118	GB19610019268	19610529
US3200555 A	19650817	US19630279670	19630509

Probable Assignee:	HAUNI WERKE KOERBER AND CO KG
Assignee(s):(std)**:**	HAUNI WERKE KOERBER AND CO KG ; KURT KOERBER
Assignee(s):	HANNI WERKE KORBER AND CO KG ; HAUNI WERKE KOERBER AND CO K G
Inventor(s):(std)**:**	KURT LIEDTKE ; LIEDTKE KURT
International class (IPC 8-9):	B65B11/18 B65B11/22 B65B51/10 (Advanced/Invention); B65B11/06 B65B51/10 (Core/Invention)
International class (IPC 1-7):	B65B11/22
CPC:	B65B11/18 B65B11/22 B65B51/10
European class:	B65B11/18 B65B11/22 B65B51/10
US class:	53/231 53/370.7 53/387.3 53/463 53/466 53/477

Classification Explorer

Cited documents:	US2915867 A, US2153483 A, US2144448 A, US2078619 A, US2050818 A, DE863617 A, DE568199 A,
Forward Citations:	WO06119095, US5467579, US5365721, US4984412, US4843800, US4603534, US4198258, US4044528, US3577865, US3492781, US3332207, GB2241217, GB2241217, DE4105991, DE4105991, DE3638627, DE3332950, DE2740266, DE2601306, DE1274951,

Abstract:
Source: GB975759A 975,759. Wrapping. K. KIRBER. May 29, 1961 [July 7, 1960], No. 19268/61. Heading B8C. Relates to a method of wrapping block-shaped articles in which the wrapper is bent to U-form by engagement with the advancing article, the side and end flaps of the wrapper being folded in and **sealed** during two consecutive stacking operations. Articles 23 are pushed from a stack 4 by reciprocating pushes 3 (see Specification 972,706) against a wrapper 6 introduced by suction rollers 5. The wrapper 6 is bent to U-form as the articles advances, the small end flaps being folded in by blades 7. The **package** is then advanced into the first stacker 8, a plunger 10 pushing it upwards so that the side flaps are folded in by a lip 11 on the plunger 10 and the wall of the stacker 8 respectively. The stacker wall is heated to cause heat **sealing** as the **package** moves up the stacker. From the top of the stack the article is engaged by a pusher 14, side arms of which fold in the second small end flaps, and advance the **package** into a second stacker 12. Upward movement of a second plunger 17 causes the end flaps to be folded in by lips 18 on the plunger 17 and the walls of the stacker 12 respectively. The walls of the stacker are heated as before. The wrapper may be **sealed** by adhesives, the heated stackers then acting as driers.



148) Family number: 25241247 (US3190531A)

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Title: **Container**

Priority: SE19610010628 19611026

Family:

Publication number	Publication date	Application number	Application date
CH395849 A	19650715	CH19620012436	19621023
GB957696 A	19640513	GB19620038405	19621010
NL140474 B	19731217	NL19620284675	19621024
US3190531 A	19650622	US19620233104	19621025

Probable Assignee: AKERLUND AND RAUSING AB

Assignee(s):(std)**:** AKERLUND AND RAUSING AB ; INGVAR HOLMSTROM KJELL

Assignee(s): A B AKERLUND AND RAUSING LUND ZWEDEN ; AB AKERLUND AND RAUSING

Inventor(s):(std)**:** KJELL INGVAR HOLMSTROM ; INGVAR HOLMSTROM KJELL

Inventor(s): HOLMSTROM KJELL INGVAR

International class (IPC 8-9): B65D5/02 B65D5/70 B65D5/74 B65D77/06 (Advanced/Invention); B65D5/02 B65D5/70 B65D5/74 B65D77/06 (Core/Invention)

International class (IPC 1-7): B65D31/08 B65D5/56 B65D5/74 B65D85/80

CPC: B65D5/0272 B65D5/70 B65D5/745 B65D77/064

European class: B65D5/02H B65D5/70 B65D5/74B3 B65D77/06B1

US class: 229/122.32 229/123.2 229/158 383/204

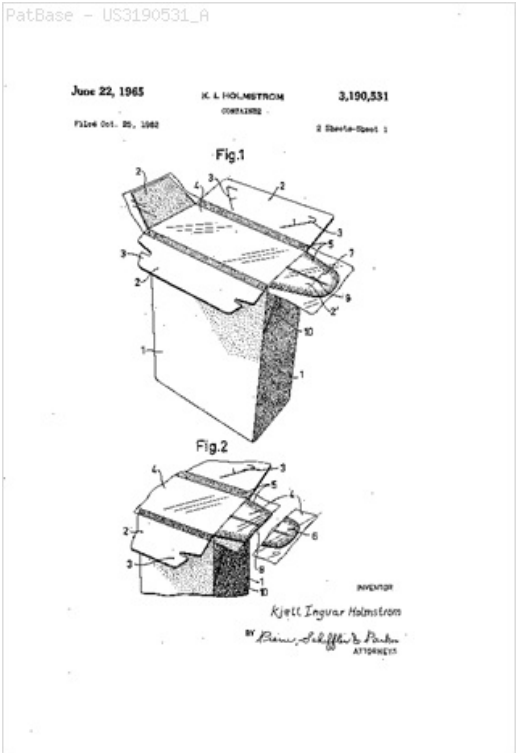
Classification Explorer

Cited documents: US3113712 A, US3057531 A, US2982461 A, US2933229 A, US2899109 A, US2613025 A, US1437511 A, GB191222431 A,

Forward Citations: US5160308, US5033867, US4771938, US4720015, US4365737, US3897900, US3680764, US3580483, US3333758, US3301458, US3288345, EP0253549,

Abstract:

Source: GB957696A 957,696. Cartons. AKERLUND and RAUSING A.B. Oct. 10, 1962 [Oct. 26, 1961], No. 38405/62. Heading B8P. In a **container** having a base, side walls 1, and flaps 2 which form the top **closure**, a pouring channel is formed between the flap 2^1 and a **cover** sheet 4, which is placed across the top **opening** and secured to the insides of the flaps 2, by cutting off part of the flap along the perforation 7. The **cover** is attached to the flaps by means of the continuous glue seam 5 running around the **opening** and which is N-shaped across the flap 2^1. To widen the channel the side panel adjoining 2^1 may be provided with converging crease lines 10, and also the flap 2^1 may be provided with a crease line 9. The **cover** sheet 4 may made of transparent material to facilitate inspection of the contents. After use the smaller flaps 2 are folded across the **cover** sheet, whereafter the larger flaps, by means of the locking arrangements, lock themselves as well as the smaller flaps. Alternatively all the flaps except 2^1 may be folded as above, and then the remaining flap 2^1 may thereafter be folded back over the flaps 2 and locked to these. A lining may be applied to the insides of the side walls and the flaps, also helping to strengthen the corner points. Specification 729,284 is referred to.



149) Family number: 21473815 (GB963138A)

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Title:	**Bags**
Priority:	GB19610012980 19610411

Family:

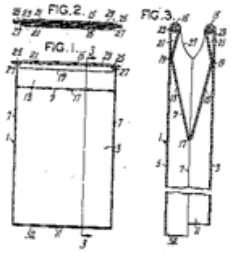
Publication number	Publication date	Application number	Application date
GB963138 A	19640708	GB19610012980	19610411

Probable Assignee:	BEMIS BRO BAG CO
Assignee(s):(std)**:**	BEMIS BRO BAG CO
Assignee(s):	BEMIS BRO BAG COMPANY
Inventor(s):(std)**:**	ASHTON GEORGE HENRY
International class (IPC 8-9):	B65D33/28 (Advanced/Invention); B65D33/16 (Core/Invention)
International class (IPC 1-7):	B65D33/28
CPC:	B65D33/28
European class:	B65D33/28
Classification Explorer	
Forward Citations:	JP2205546, GB2224264, FR2171522, FR2171522, EP0371539,

Abstract:

Source: GB963138A 963,138. **Bags**; parcel carriers. BEMIS BRO. **BAG** CO. April 11, 1961, No. 12980/61. Heading A4G. [Also in Division B8] A **bag**, preferably of plastics film, has a gusset forming a top **closure** and a draw cord above the gusset for closing the **bag** after use of part of its contents. The cord 23 is contained in a hem 75 and the **bag** base may consist of a further gusset 61. The **bag** is filled through a slit 81 in the upper gusset which slit is closed by adhesive tape. Alternatively, the **bag** bottom is left **open** and the **bag** inverted in a **box** mould 29 with its hem accommodated in a recess 30a in the base. After filling, which may be assisted by vibration, a stiff card 31 is inserted and the **bag** end 11 folded on to it and **sealed**. A metal handle 43 having lugs 25 to receive the cord loops may be used to carry the **bag**. Specification 874,814 is referred to.

PatBase - GB963138_A



150) Family number: 30960844 (US3325961A)

Title: METHOD AND A DEVICE FOR MANUFACTURING FILLED AND **SEALED** **PACKAGES**

Priority: FI19700002650 19640116 NL19640000247 19640115 NL19720006359 19720510 SE19630000442 19630116

Family:

Publication number	Publication date	Application number	Application date
BR6456140 A0	19730130	BR19640156140	19640116
CH411674 A	19660415	CH19640000400	19640115
CS183601 B2	19780731	CS19640000246	19640115
CY512 A	19691222	CY19690000512	19691222
DE1213781 B	19660331	DE1964A044986	19640113
DE1213781 C	19660331	DE1964A044986	19640113
DE1213781 C2	19730412	DE1964A044986	19640113
DE1786450 C1	19770414	DE19641786450	19640113
DK113200 B	19690224	DK19640000198	19640115
ES295314 A1	19640901	ES19640295314	19640115
FI45143 B	19711130	FI19640000078	19640116
FI45143 C	19720310	FI19640000078	19640116
FI45271 B	19711231	FI19700002650	19700929
FI45271 C	19720410	FI19700002650	19700929
GB1012867 A	19651208	GB19640001623	19640114
MY7000075 A	19701231	MY19700000075	19701231
NL142122 B	19740515	NL19640000247	19640115
NL153141 B	19770516	NL19720006359	19720510
NL6400247 A	19640717	NL19640000247	19640115
NL7206359 A	19720725	NL19720006359	19720510
NO115284 B	19680909	NO19640151620	19640116
SE324132 B	19700519	SE19630000442	19630116
US3325961 A	19670620	US19640337660	19640114

Probable Assignee: TETRA PAK AB

Assignee(s):(std)**:** LINDH THORSTEN L ; LINDH THORSTEN L SE ; STARK SVEN O ; TETRA PAK AB ; TETRA LUND 1 AB ; SWEDE HARALD G SE ; STARK SVEN O SE ; WETTLEN LARS M SE ; WETTLEN LARS M ; SWEDE HARALD G ; TETRA AKTIEBOLAGET ; TETRA AB

Assignee(s): TETRA LUND SCHWEDEN AB ; AB TETRA ; AB TETRA LUND 1 ; AB TETRA LUND ZWEDEN ; AB TETRA PAK ; AKTIEBOLAGET TETRA LUND SCHWEDEN

Inventor(s):(std)**:** MALTE ROLAND WETTLEN LARS ; OLOF SOEREN STARK SVEN ; ROLAND WETTLEN LARS MALTE ; SOEREN STARK SVEN OLOF ; SOREN STARK SVEN OLOF ; STARK S ; STARK SVEN O ; STARK SVEN OLOF SOEREN ; LENNARTSON LINDH THORSTEN ; LINDH T ; LINDH THORSTEN L ; LINDH THORSTEN LENNARTSON ; SWEDE H ; SWEDE HARALD G ; SWEDE HARALD GEORG ; THORSTEN LENNARTSON LINDH ; WETTLEN L ; WETTLEN LARS M ; WETTLEN LARS MALTE ROLAND ; GEORG SWEDE HARALD ; HARALD GEORG SWEDE ; WETTLEN LARS MALTE RONALD

Inventor(s): LARS MALTE ROLAND WETTLEN ; WETTLEN LARS MALTE ROLAND LOMMA ; SWEDE HARALD GEORG LIMHAMN ; TETRA AB ; LINDH THORSTEN LENNARTSON LUND ; STARK SVEN OLOF SOEREN SOEDRA SANDBY ; STARK SVEN OLOF SOREN ; SVEN OLOF SOEREN STARK

International class (IPC 8-9): B65B61/24 B65B9/12 B65B9/13 B65B9/20 (Advanced/Invention);
B65B9/20 (Advanced/Non-invention);
B65B61/00 B65B9/10 (Core/Invention)

International class (IPC 1-7): B65B3/02 B65B61/24 B65B7/04 B65B9/10 B65B9/12 B65B9/13

CPC: B65B9/12 B65B9/13 B65B9/2049 B65B61/24

European class: B65B61/24 B65B9/12 B65B9/13 B65B9/20S

US class: 53/451 53/551

Classification Explorer

Cited documents: US420983 A, US3035302 A, US3006121 A, US2982066 A, US2944469 A, US2928216 A, US2790994 A, US2390337 A, US2196666 A, US2113658 A, US2113636 A, GB827792 A, GB686078 A, FR1304003 A, DE1119750 B, DE1119750 A, DE1113174 B, AU149954,

Forward Citations: WO13167502, WO11065884, US9809342, US9284078, US6539692, US6265002, US6195965, US6178724, US6164042, US6112498, US6058680, US6038838, US5992131, US5970687, US5800851, US5800062, US5761884, US5701724, US5619844, US5531375, US5440860, US5347792, US5222346, US5155980, US4881360, US4817366, US4750534, US4747253, US4617779, US4562691, US4387547, US3918237, US3417674, US3417545, US2005156020, US2004052437, US2002139084, JP6345014, JP6321208, JP6298210, JP6298209, JP6298208, JP3827777, JP10086904, FR2547278, EP2857316, EP2662291, EP0887264, EP0829425, EP0729887, EP0460540, EP0401422, DE2751928, DE2751088, CN104271450, CN104271450, CN102648130, CN102648130,

Abstract:
Source: US3325961A 1,012,867. **Packaging**-machines. A. B. TETRA. Jan. 14, 1964 [Jan. 16, 1963], No. 1623/64. Heading B8C. A **package** is made by **sealing** and cutting a filled tube 1 at intervals, upper jaws being pivotable to heat-**seal** and cut the intermittently fed tube after pistons 20, 21 co-operate with stationary side plates 8, 9 and lower pivoted flaps 16, 17 to form the tube into the shape illustrated in Fig. 5. The level of material in the tube may lie above the **sealing** zone; or it may lie below the **sealing** zone and the remaining space be filled with a gas. The material, which may be a liquid, granular, or a powder, provides an internal support for the tube during the forming of the **package**. After the tube 1 is fed downwards, the pistons 20, 21 move inward and the lower flaps 16, 17 are pivoted in timed relation; thereafter, Fig. 3 (not shown), the jaws 2, 3 close to heat-**seal** the **package** which is severed from the tube by means of a knife 36, displaceable in the flap 3. The various forming members are withdrawn to enable the **package** to be ejected. The **package** may be modified subsequently by bending down its upper pin 37, and the wings 34, 35 may also be folded in. In a modification, Fig. 8, wall elements 44^1, 45^1 are pivoted inwards on jaws 38^1, 39^1 to form the **package** which is **sealed** by the jaws and cut by a knife 52^1. The forming and **sealing** **units** operate in pairs or in threes on a continuously moving tube, each set of co-operating-jaws and wall elements being actuated successively. The tube may be fed down by the jaws wholly or in combination with other tube-feeding means.

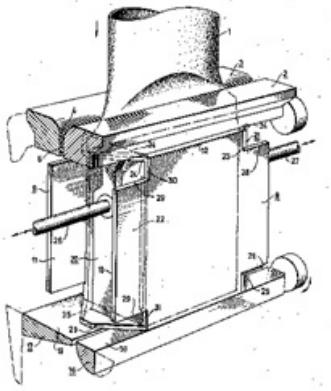
PatBase - US3325961_A

June 20, 1967 T. L. LINDH ET AL 3,325,961

METHOD AND A DEVICE FOR MANUFACTURING FILLED AND SEALED PACKAGES

Filed Jan. 14, 1964 2 Sheets-Sheet 1

Fig. 1



INVENTORS
Thorsten Lennartsson Lindh
Harald Georg Swede
Lars Malte Ryland Wetlén
By Sven Olof Sören Stark

Pierce, Scheffler & Parker
ATTORNEYS

151) Family number: 22779846 (US3195801A)

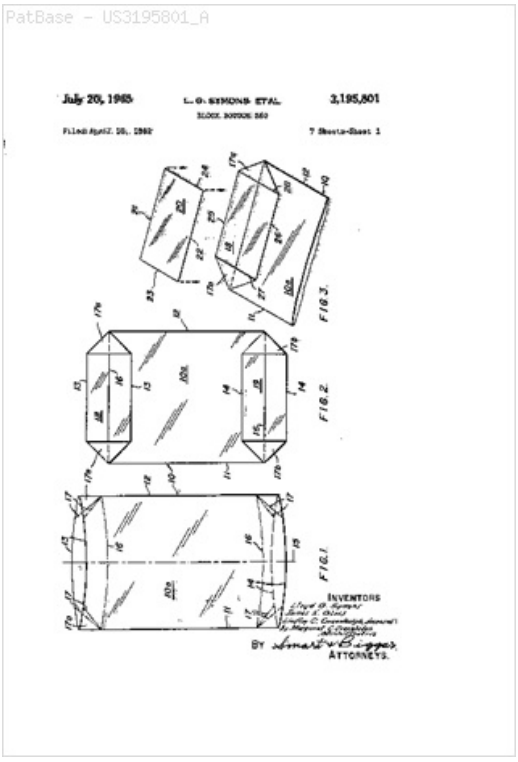
Title:	Block bottom **bag**
Priority:	CA19610825249 19610608

Family:

Publication number	Publication date	Application number	Application date
GB965338 A	19640729	GB19620021462	19620604
US3195801 A	19650720	US19620189227	19620416

Probable Assignee:	ST REGIS CONS PACKAGING LTD
Assignee(s):(std):	ST REGIS CONS PACKAGING LTD
Assignee(s):	ST REGIS CONSOLIDATED PACKAGING LIMITED
Inventor(s):(std):	STUART GLASS JAMES ; GEORGE SYMONS LLOYD ; CLARE GREENHALGH MARGARET
Inventor(s):	GREENHALGH MARGARET CLARE ; GLASS JAMES STUART ; SYMONS LLOYD GEORGE
International class (IPC 8-9):	B65D30/18 B65D30/24 (Advanced/Invention); B65D30/10 B65D30/24 (Core/Invention)
International class (IPC 1-7):	B29C24/00 B65D31/00 B65D33/00
CPC:	B65D31/08 B65D31/142
European class:	B65D31/08 B65D31/14A
US class:	383/126 383/50 383/54 493/219
Classification Explorer	
Cited documents:	US401687 A, US325922 A, US3000551 A, US2771010 A, US2722165 A, US2381850 A, US2353605 A, US2275505 A, US2177122 A, US1995286 A, NO94813 A, FI30641 A,
Forward Citations:	WO15155056, WO15155054, WO05030594, US6746388, US6662829, US5944189, US5845995, US5160308, US5033867, US4553668, US3896708, US3690545, US3430844, US3369731, US3313217, US3297234, US3297152, US3291376, US3272093, US3263902, US2012184422, US2005069231, US2003189062, JP2006036367, GB2317159, GB2317159, GB2310194, GB2310194, CN106414060, AU718756, AU2006202552, AU2006202552,

Abstract:
Source: GB965338A 965,338. Block-bottom **bags**. ST. REGISCONSOLIDATED **PACKAGING** Ltd. June 4, 1962 [June 8, 1961], No. 21462/62. Heading B8K. A **bag** is formed from heat-**sealable** fold-flat tube by folding in corners 17a (Fig. 3), and then heat **sealing** in position a **cover** 20. The **cover** 20 may consist of a flap 51, 52 (Fig. 11) and slits 53 may be formed in the tube before folding. A weld may reinforce the fold 60-60. The flaps 51, 52 of Fig. 11 are in opposite walls of the tube so that blanks can be cut from a tubular web without waste. A valve sheet 90 may be welded at 91 to the **bag** before the **cover** 20 is added, the corresponding end of the **cover** 20 being left unwelded. Further welds 93, 94 (Fig. 20) or 95 (Fig. 21) between the valve sheet and the **cover** sheet 20 may modify the shape of the valve. The valve sheet and the **cover** sheet 20 may extend beyond the margin of the **bag**, and may be welded at the edges to form a tube which can be folded over for **closure**. The tube may be gussetted. The valve flap may be **sealed** by heat-**sealing**, taping or gluing, and folded upwardly as shown at 98 in Fig. 26 to provide a pocket into which the projecting end of the valve tube formed with the **cover** sheet may be tucked. Alternatively a separate valve tube, which may be narrower than the **bag**, may be used (Fig. 30, not shown). A shield is used, when forming the welds for the **bag**, to prevent undesired welds from being formed. The welds may be formed by applying heat, by highfrequency heating, or by ultrasonic **sealing**. The **bag** may be formed of gusseted tube. Suitable materials are thermoplastic film, which may be laminated, and paper or fabric lined with thermoplastic sheet.



152) Family number: 29899697 (US3173589A)

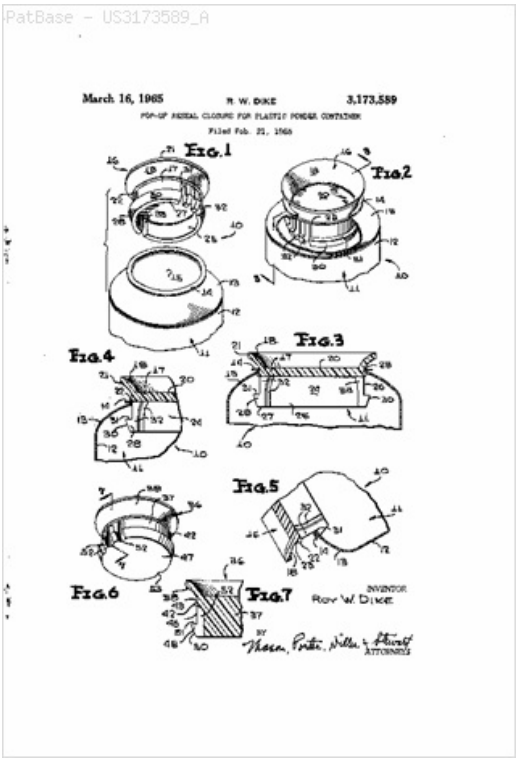
Title:	POP-UP **RESEAL** **CLOSURE** FOR PLASTIC POWDER **CONTAINER**
Priority:	US19630260235 19630221

Family:

Publication number	Publication date	Application number	Application date
NL6401688 A	19640824	NL19640001688	19640221
US3173589 A	19650316	US19630260235	19630221

Probable Assignee:	CONTINENTAL CAN CO
Assignee(s):(std):	CONTINENTAL CAN CO
Assignee(s):	CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC
Inventor(s):(std):	DIKE ROY W
International class (IPC 8-9):	A47G19/24 A47J47/04 B65D47/06 B65D47/28 (Advanced/Invention); A47G19/00 A47J47/00 B65D47/04 B65D47/06 (Core/Invention)
CPC:	A47G19/24 A47J47/04 B65D47/061 B65D47/283
European class:	A47G19/24 A47J47/04 B65D47/06A B65D47/28B
US class:	222/479 222/484 222/522
Classification Explorer	
Cited documents:	US2790582 A, US1468534 A,
Forward Citations:	WO8303588, US5169035, US3756480, US3469748, US2015366385, FR2609000, FR2555140, EP0143704,

Abstract:
Source: US3173589A (Claim 1) 1. A combined **container** and **closure** wherein said **container** comprises a body having an **opening** defined by an inwardly directed peripheral portion, said **closure** being slidably received in said **opening** and including a body having an upper peripheral rib, a lower peripheral rib and an intermedíate peripheral rib between said upper and lower peripheral ribs, said intermediate peripheral rib nor-mally underlying and engaging said inwardly directed peripheral portion in a first position thereof but being 35 capable of contactingly overlying said peripheral portion in a second position and spacingly overlying said peripheral portion in a third position, at least one passage in a peripheral surface of said **closure** body and said passage extending at least between said lower and intermediate 40 peripheral ribs whereby said one passage places the interior of said **container** body in communication with the atmosphère when said intermediate peripheral rib is in the third position thereof.



153) Family number: 22569033 (US3147902A)

© PatBase

Title:	COMPOSITE BODY **CONTAINERS**
Priority:	US19620187712 19620416

Family:

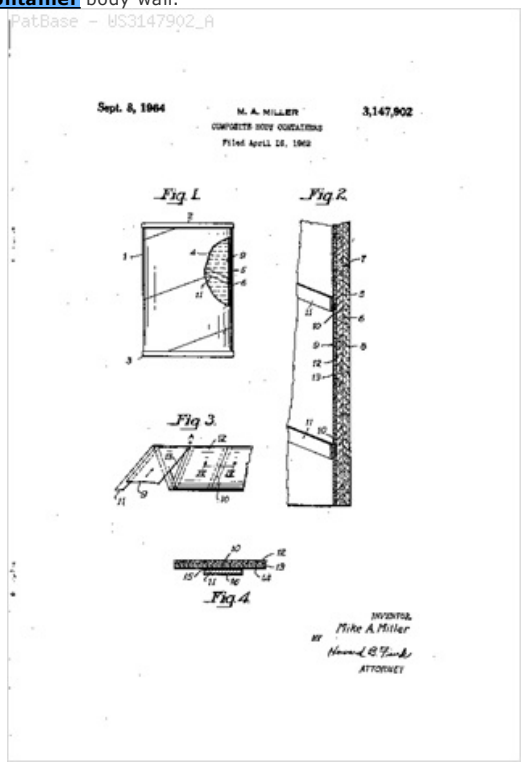
Publication number	Publication date	Application number	Application date
GB984064 A	19650224	GB19630012280	19630328
US3147902 A	19640908	US19620187712	19620416

Probable Assignee:	ALUMINUM CO OF AMERICA
Assignee(s):(std):	ALUMINUM CO OF AMERICA
Assignee(s):	ALUMINUM COMPANY OF AMERICA
Inventor(s):(std):	ANTHONY MILLER MIKE
Inventor(s):	MILLER MIKE ANTHONY
International class (IPC 8-9):	B65D3/00 B65D3/22 (Advanced/Invention); B65D3/00 (Core/Invention)
International class (IPC 1-7):	B65D3/04 B65D5/54 B65D8/04
CPC:	B65D3/00 B65D3/22
European class:	B65D3/00
US class:	229/4.5 229/5.82

Classification Explorer

Cited documents:	US3035753 A, US2539450 A, US2456387 A, US2393347 A, US2349730 A, GB683206 A,
Forward Citations:	US7757935, US5916080, US4856709, US4717374, US4091929, US3979048, US3510050, US3454207, US3288341, US3286904, US2007295795, FR2515611,

Abstract:
Source: GB984064A 984,064. Non-metallic tubes. ALUMINUM CO. OF AMERICA. March 28, 1963 [April 16, 1962], No. 12280/63. Heading F2P. [Also in Divisions B5 and B8] A tubular-walled **container** is formed of two layers 5, 6 of helically wound kraft paper, chipboard or cardboard adhered together and a lining formed by a laminate of helically wound paper 12 and metal foil 13, the lining being adhered to the layer 6 and **sealed** at its joint by a metal foil tape 11. The exposed face of the foil 13 has a coating of thermoplastic resin, e.g. vinyl resin and wax. The tape 11 is similarly coated on its exposed side, and, for joining it to the coated foil 13 has on its opposite side a coating of a plastics material heat-**sealable** at low temperature, e.g. a polyamide resin or plasticized vinyl copolymer. Metal end caps are secured to the **container** body wall.



154) Family number: 22317733 (US3151800A)

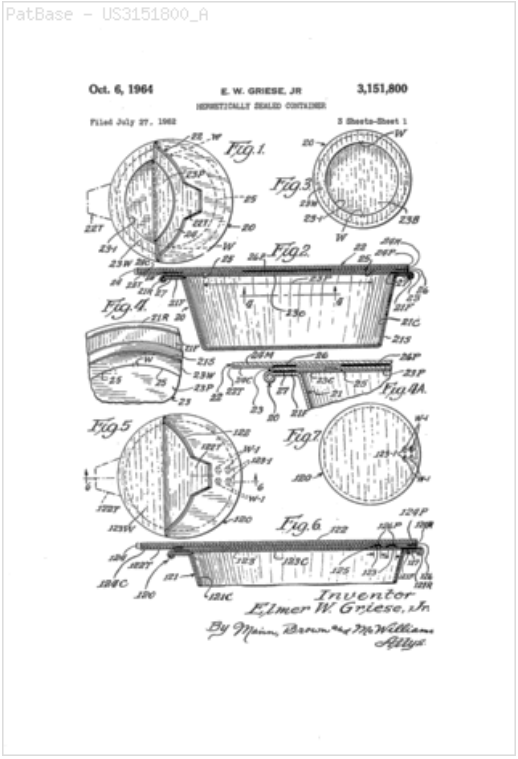
Title:	HERMETICALLY **SEALED** **CONTAINER**
Priority:	US19620212931 19620727

Family:

Publication number	Publication date	Application number	Application date
US3151800 A	19641006	US19620212931	19620727

Probable Assignee:	EKCO CONTAINERS INC
Assignee(s):(std):	EKCO CONTAINERS INC
Inventor(s):(std):	GRIESE JR ELMER W
Inventor(s):	JR ELMER W GRIESE
International class (IPC 8-9):	B65D77/20 (Advanced/Invention); B65D77/10 (Core/Invention)
International class (IPC 1-7):	B65D17/16
CPC:	B65D77/2056 B65D2577/2025 B65D2577/205 B65D2577/2091
European class:	B65D77/20E1B3B2 L65D577/20L L65D577/20M1 L65D577/20P2
US class:	220/257.2 220/657 229/5.82
Classification Explorer	
Cited documents:	US3079057 A, US2858060 A, US2750096 A, US1845965 A,
Forward Citations:	WO16187539, US9114925, US8172085, US7958998, US4285461, US4183458, US3561664, US3281051, US2011210032, US2008000794, FR2744986, EP0790193, EP0358001, EP0093442, EP0093441,

Abstract:
Source: US3151800A (Claim 1) 1. In a hermetically **sealed** **package**, an impervious **container** including a side wall and a continuons outwardly extending flange about the top of the side wall, a **cover** **unit** extended across said **container**, said **cover** comprising metal foil upper and lower members having the same size and pian form and with said upper member having an integrai **tab** member at one edge thereof extending beyond the edge of the lower member, said lower metal foil member having a plurality of slits formed therein in an end to end relation and defining the boundaries of a pull-out section supported in the piane of said lower member by unbroken webs between adjacent ends of said slits, adhesive means securing said pull-out section io the opposed surface of said upper member, adhesive means securing and hermetically **sealing** said upper and lower members of the **cover** together in a continuous area opposite said flange, and adhesive means securing and hermetically **sealing** said upper and lower foil members together in a continuous area opposite said flange.



155) Family number: 764120 (US3250187A)

Title:	**BAG** MAKING MACHINE
Priority:	NL19640001318 19640214 US19630290665 19630626

Family:

Publication number	Publication date	Application number	Application date
BE649688 A	19641016		19640624
CH389404 A	19650315	CH19640001371	19640204
CH417306 A	19660715	CH19640008437	19640626
GB1073726 A	19670628	GB19640026247	19640625
LU46389 A	19720101		19640624
NL6401318 A	19650816	NL19640001318	19640214
NL6407244 A	19641228	NL19640007244	19640625
US3250187 A	19660510	US19630290665	19630626

Probable Assignee:	UNION CARBIDE CORP
Assignee(s):(std)**:**	FERRARI MARIO ; UNION CARBIDE CORP
Inventor(s):(std)**:**	MARIO FERRARI ; KASTING HOWARD E ; HOWARD EDWARD KASTING
Inventor(s):	FERRARI MARIO ; EDWARD KASTING HOWARD
International class (IPC 8-9):	B26F3/06 B29C65/18 B31B19/84 B31B37/00 B65B35/20 B65B57/14 B65B67/00 G03D13/00 (Advanced/Invention); B26F3/06 B29C65/18 B31B19/00 B31B37/00 B65B35/00 B65B57/00 B65B67/00 G03D13/00 (Core/Invention)
International class (IPC 1-7):	B29C24/00 B31B31/60 B31B37/26 B65B35/20 B65B57/14 B65B67/00 B65D G03B15/07
CPC:	B26F3/06 B29C65/18 B29C66/80 B65B35/20 B65B57/14 B65B67/00 G03D13/001 B29C66/81815 B29C66/81435 B29C66/83221 B29C66/4312 B29C66/71 B29C66/8221 B29C65/305 B31B70/85 B31B2155/00 B31B2155/003 B31B2160/20 B29C66/1122
European class:	B26F3/06 B29C65/18 B29C65/18G B29C66/80 B31B19/84 B31B37/00 B65B35/20 B65B57/14 B65B67/00 G03D13/00C L31B219/90J4 L31B237/20 L31B237/60
US class:	493/200 493/209 493/213 493/256 493/30
Classification Explorer	
Cited documents:	US3215048 A, US3191507 A, US2961930 A,
Forward Citations:	WO17156641, US4493686, US4371367, US4230030, US3974747, US3585907,

Abstract:
Source: GB1073726A 1,073,726. Making cross bottom **bags** with valves. UNION CARBINE CORPORATION. June 25, 1964 [June 26, 1963], No. 26247/64. Heading B5D. [Also in Division B8] Single or multiply thermoplastic tubing is severed transversely and longitudinally (Fig. 2, not shown) and the bottom flaps infolded to form a block-bottom **bag**. Forming block-bottom **closures**.-**Bag** tubing 12 (Fig. 1), which has been lowered over a mandrel 40 is held under tension by clamps 4 and a gripper assembly 30 whilst the tubing is severed transversely by a knife (70, Fig. 27, not shown) and vertically and diagonally by knives (74). Magnetic members (56, Fig. 8, not shown) which have been lowered to engage metallic leaves 44 in the mandrel are then raised so that the leaves 44 are spread, causing side flaps of the **bag** bottom to be out-folded and the end flaps to be infolded. Rolls (304, Fig. 24, not shown) above the clamping platens (300, 302) of the clamp are moved downwardly in quick succession through **openings** in the platens to fold under the side flaps. To prevent catching of the two side flaps, one flap is forced upwards against the platen surface by arms (91) and air jets (93). The cutting and heating assembly is then further advanced until the heat **sealer** (62, Fig. 27, not shown) is beneath the infolded side flaps. A cooled clamping platen (430, Fig. 26c, not shown) is then raised to engage the infolded flaps, and a heat **seal** bar (412) engaging slots in the platen (430) **seals** the bottom of the **bag**. Rolls (21, 23, Fig. 8, not shown) are moved downwards to partially collapse the mandrel leaves 44 and the mandrel assembly 40 is lowered with the tubing until the leaves 44 engage a saddle (78) of the gripper assembly (30). The tubing is held by clamps (803) whilst the mandrel is raised and air injected into the tube (12) to prevent formation of a vacuum. After the top of the **bag** has been severed by the cutters (60) a wheel (59) presses the top of the **bag** against a clamping platen (302^1) of the clamp (28) where it is held by suction. When the bottom of the next **bag** is being heat **sealed** the **bag** 72 is rotated through 90 degrees to a second station where a valve is inserted. Inserting valves.-The top ply of the portion of the **bag** held against the clamps (28) is raised by suction cups (96, Fig. 12, not shown) and a shuttle assembly (84) inserted between them causing the end **tabs** to be infolded and the side flaps outfolded. A valve sheet (88) is inserted under an end **tab** and a heat **sealer** (92) lowered to **seal** the end **tab** and the valve sheet together, the shuttle plate preventing the valve sheet from being **sealed** to the side walls of the **bag**. A clamping member (90) is then lowered to hold the edge of the valve sheet against the clamp (28) and the heat **sealer** (92) and shuttle (86) retracted. The valve web (713) is held in position by a clamp (711) whilst cutting means (94) are swung downwardly so that an electrically heated wire (120) severs the valve sheet. Valves may be inserted at each end of the **bag**. Alternatively a bottom sheet overlapping both infolded end **tabs** may be inserted, instead of a valve. **Sealing** top **closures**.-As the **bag** is rotated through a further 90 degrees a silicon-coated rubber platen 130 (Fig. 1) is inserted into the top of the **bag** over the infolded **tab** at the valve end and under the infolded **tab** at the other end. The rolls (304, Fig. 24, not shown) on the clamps 28 are then advanced to fold over the side flaps and a heat **sealer** lowered to form the top **closure**. Discharging finished **bags**.-As the platen 130 is being withdrawn between stations 3 and 4 small air jets are directed between the completed **bag** **closure** and the clamping platens to break the **bag** loose. The clamps are then **opened** and the finished **bag** is discharged on to a shoot.

PatBase - US3250187_A

May 10, 1966 H. E. KASTING 3,250,187
BAG MAKING MACHINE
Filed June 28, 1965 26 Sheets-Sheet 1

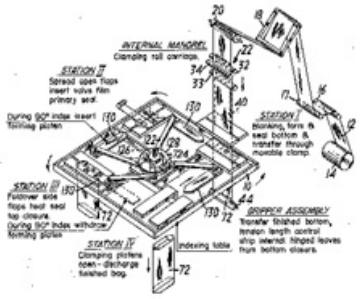


FIG.1

INVENTOR.
HOWARD E. KASTING
BY
ATTORNEY

156) Family number: 29924429 (US3438176A)

Title: APPARATUS FOR MANIPULATING PARALLELEPIPED **CONTAINERS**

Priority: DE1963H049553 19630626

Family:

Publication number	Publication date	Application number	Application date
AT252821 B	19670310	AT19640005013	19640611
BE649805 A	19641016		19640626
CH439061 A	19670630	CH19640007279	19640604
DE1247192 B	19670810	DE1963H049553	19630626
DK116498 B	19700112	DK19640003200	19640625
FI43279 B	19701102	FI19640001300	19640616
GB1046660 A	19661026	GB19640022267	19640529
LU46297 A	19641211		19640611
NL6407241 A	19641228	NL19640007241	19640625
NO117291 B	19690721	NO19640153788	19640624
SE308275 B	19690203	SE19640007763	19640625
US3438176 A	19690415	US19640353672	19640323

Probable Assignee: HABRA WERK OTT KG

Assignee(s):(std)**:** HABRA WERK OTT KG ; HABRA WERK OTT W ; HABRA WERK WILH F OTT ; KURT OTT

Assignee(s): HABRA WERK WILHELM F OTT

Inventor(s):(std)**:** REIL W ; REIL WILHELM ; SCHWARZWAELDER W ; SCHWARZWALDER WERNER ; WILHELM REIL ; WERNER SCHWARZWAELDER ; SCHWARZWAELDER WERNER

Inventor(s): WERNER SCHWARZWALDER

International class (IPC 8-9): B65B51/16 B65B61/24 B65B7/04 (Advanced/Invention); B65B51/10 B65B61/00 B65B7/00 (Core/Invention)

International class (IPC 1-7): B65B61/24 B65B7/04 B65B7/18 B65B7/20

CPC: B65B7/04 B65B51/16 B65B61/24

European class: B65B51/16 B65B61/24 B65B7/04

US class: 53/234 53/247 53/250 53/372.2 53/374.7 53/375.2 53/565

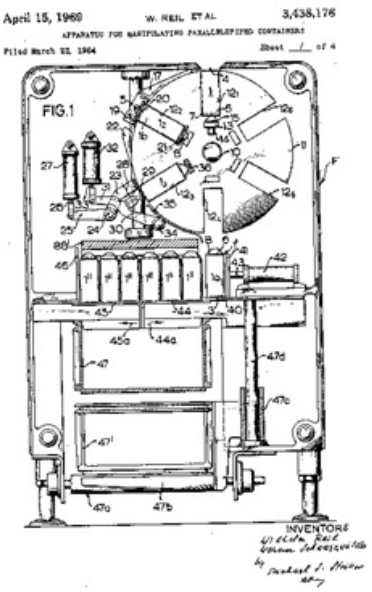
Classification Explorer

Cited documents: US3089298 A, US3055490 A, US2196666 A, US1989471 A, GB686078 A, GB393095 A, DE1841376 U, DE1098436 A,

Forward Citations: WO9609964, US6226964, US5966899, US5613344, US5551211, US5533323, US5517801, US4825625, US4776147, US4510732, US4010598, EP0271759, EP0061663, DE3432517, DE2846020, CN106144061, CN105836265, CN103029868,

Abstract:
Source: GB1046660A 1,046,660. **Packaging**-machines; article grippers. K. OTT, [trading as HABRA-WERK WILHELM F. OTT]. May 29, 1964 [June 26, 1963], No. 22267/64. Headings B8C and B8H. A machine complete filled parallelepiped **bags** of paper or the like in direct succession to the production and filling of the **bags**, by receiving the **bags** in radial compartments formed in one or more intermittently rotatable drums, on which it folds over the end seams and folds in and **seals** triangular side **tabs** protruding from the **bag** corners and passes the completed **bags** in an upright position to removal or packing devices. Fig. 1 is a cross-section of one embodiment which receives **bags** with heat-**sealed** upper and lower seams and laterally projecting flaps, Fig. 14 (not shown), and discharges them with folded-over lower flaps and upwardlyprojecting upper flaps, Fig. 15 (not shown). The drum 11 has compartments 12 1 -12 6 **open** at both end faces of the drum. The **bag** 1 from a filling machine is gravity fed into the compartment 12 1 with the **closure** end 6 facing radially inwards. Members 13 on both sides of the drum assist in pressing down the seam 7 and, during rotation to position 12 2, triangular side **tabs** 8 are disposed on both end faces of the drum by fixed folders (not shown) and their layers **sealed** together by heated rams 21. During this same rotation the upper **bag** seam 4 is pressed flat against the **bag** bottom 3 by a folder 17, and folders (not shown) place side **tabs** 5 in the vertical plane by means 20 operating from both sides of the drum. As the **bag** rotates to position 12 3, ploughs 22 fold the side **tabs** 5 against the **bag** bottom 3 and in this position 12 3, **sealing** jaw 30 above and tongue 29 beneath the seam 4 combine to **seal** the latter to the side **tabs** 5. At the inner end of compartment 12 3 a cutting device 36 severs the corners of the flaps 8. The completed **bag** 1 is then dropped from position 12 4 on to a plate 40 from which the **bags** are successively slid by a plunger 41 on to supporting plates 44, 45. These plates move apart for the full battery of **bags** to drop into dispatch **container** 47 which is lowered and carried away on a conveyer belt 47a. In another embodiment, a twin rotating drum assembly (Fig. 9), both sets of triangular side **tabs** may be **sealed** against the ends of the **bags**. **Bags** in passage from the entry position 1 to position 1b have the side **tabs** 5 folded up then inwards over a heated bar 73 by reciprocating blades 91. A ram 74 finally **seals** them to the **bag** bottom. The **bags** are ejected at 1w by means 76 6 to the second drum where identical operations are performed on the side **tabs** 8. After the finished **packages** have been collected on the plates 44, 45 as before, their top **seals** are engaged by grippers on a head 88 and lowered into a **container** 47. Blocks c. may be placed in the pockets to reduce their radial dimension to accommodate different sized **packages**, Figs. 10, 11 (not shown).

PatBase - US3438176_A



157) Family number: 816745 (US3374527A)

Title: METHOD OF MAKING **DISPENSING** **CONTAINER**

Priority: FR19640975167 19640520 US19630316327 19631015 US19640404997 19640918

Family:

Publication number	Publication date	Application number	Application date
AU4454764 A1	19651118	AU19640044547	19640515
BE647935 A	19641116		19640514
FR1396738 A	19650423	FR19640975167	19640520
GB1086892 A	19671011	GB19640039863	19640930
NL6407274 A	19650420	NL19640007274	19640626
US3255937 A	19660614	US19630316327	19631015
US3374527 A	19680326	US19640404997	19640918

Probable Assignee: CONS THERMOPLASTICS CO

Assignee(s):(std)**:** CONS THERMOPLASTICS CO ; CONS THERMOPLASTICS COMPANY ; CONSOLIDATED THERMOPLASTICS CO ; REXALL DRUG CHEMICAL

Assignee(s): CONSOLIDATED THERMOPLASTICS COMPANY ; REXALL DRUG AND CHEMICAL CO ; REXALL DRUG AND CHEMICAL COMPANY

Inventor(s):(std)**:** JARRETT CARL L

Inventor(s): CARLL JARRETT

International class (IPC 8-9): B29C17/07 B65D35/08 B65D35/48 B65D47/20 B65D47/26 B65D83/06 (Advanced/Invention); B65D35/02 B65D47/04 (Core/Invention)

International class (IPC 1-7): B65D47/28 B65D83/06

CPC: Y10T29/4984 Y10T29/4987 Y10T29/49876 B65D47/265 B65D35/08

European class: B65D35/08 B65D47/26D4

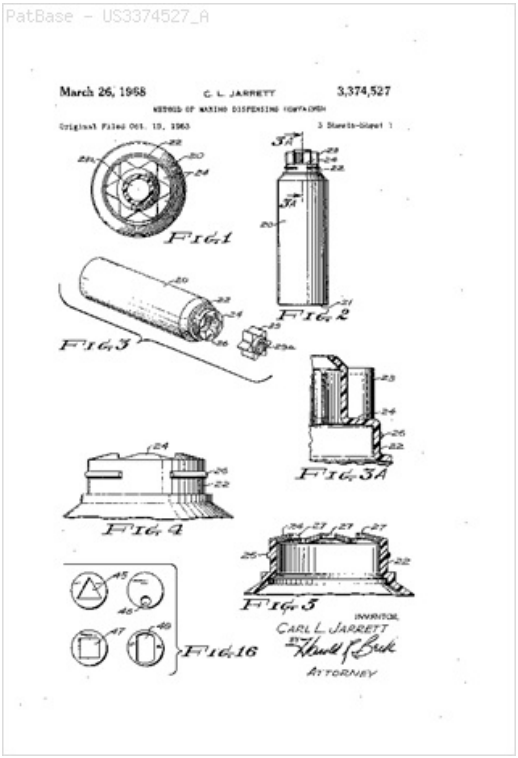
US class: 215/43 222/480 222/498 222/512 222/548 222/575 264/152 264/161 264/536 264/540 29/434 29/450 29/453 294/340 D9/450

Classification Explorer

Cited documents: US3124842 A, US3114596 A, US3113831 A, US3084396 A, US2975946 A, US2962758 A, US2943771 A, US2805787 A, US2715480 A, US2626885 A, US2449285 A, US2103111 A, US2029219 A, US1685147 A, US1501209 A, US1284635 A, US1141535 A, US1081555 A, US1021480 A, GB188811723 A,

Forward Citations: WO9639329, USD798656, USD518714, USD518712, USD515919, USD509430, USD509428, USD509137, USD494065, USD494064, USD447060, US9730557, US9125520, US8444894, US7984835, US5797518, US5746356, US5661889, US5213235, US5121859, US5046646, US5000361, US3886247, US3467287, US3389840, US2014034676, US2011190108, US2009152307, US2008089967, US2006016836, US2004155069, GB2121672,

Abstract:
Source: GB1086892A 1,086,892. Caps for bottles and c. REXALL DRUG and CHEMICAL CO. Sept. 30, 1964 [Oct. 15, 1963], No. 39863/64. Heading B8T. A cap with one or more discharge **openings** is fitted over a cylindrical portion of a one-piece bottle and c., the cylindrical portion having either an eccentric filling-**opening**, or a filling **opening** with an eccentric extension, or a filling **opening** with an additional eccentric **opening**, the arrangement allowing the cap to be rotated to bring the discharge **opening** or **openings** into or out of register with the eccentric filling **opening**, the eccentric extension, or the additional eccentric **opening**. A plastics bottle is blow moulded with a wall 20, neck 22 and a neck extension 23 which is cut off to form a star-shaped filling-**opening** 26 bounded by a flange 24. The cap 28, which has discharge holes 30, is snapped on to the neck 22 and held in position by a rib 25 on the neck co-operating with an internal groove in the cap. The flange 24 which is slightly conical, forms a **seal** against the inside of the cap and rotation of the cap brings the holes 30 into and out of register with the apices of the hole 26. In a modification, the filling **opening** is keyhole-shaped, and the discharge **openings** comprise a single **opening** spaced from a group of smaller **openings**.



158) Family number: 22883561 (US3159262A)

Title:	MONEY-HANDLING DEVICES
Priority:	US19610094274 19610308

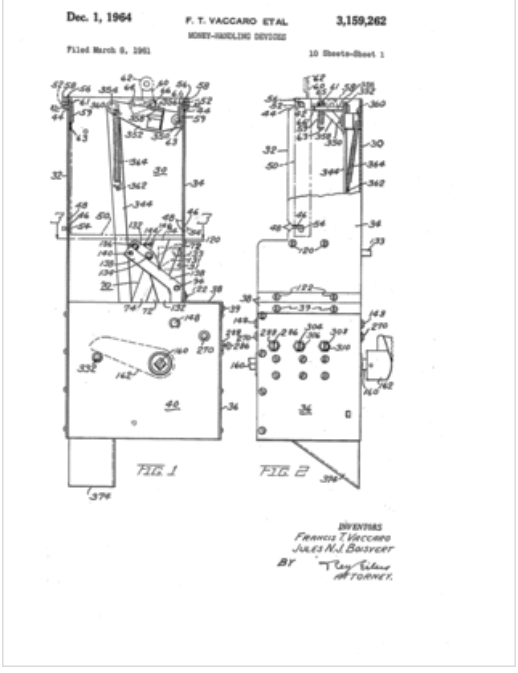
Family:

Publication number	Publication date	Application number	Application date
US3159262 A	19641201	US19610094274	19610308

Probable Assignee:	NAT REJECTORS GMBH
Assignee(s):(std):	NAT REJECTORS GMBH
Assignee(s):	NATIONAL REJECTORS INC
Inventor(s):(std):	BOISVERT JULES N J ; VACCARO FRANCIS T
International class (IPC 8-9):	G07F5/04 (Advanced/Invention); G07F5/00 (Core/Invention)
International class (IPC 1-7):	G07F5/04
CPC:	G07F5/04
European class:	G07F5/04
US class:	194/236 194/256
Classification Explorer	
Cited documents:	US764548 A, US687008 A, US2925898 A, US2916126 A, US2666514 A, US2549168 A, US2247888 A, US2132804 A, US2083928 A, US2040983 A, US2037462 A, US1983073 A, US1788523 A, US1786014 A, US1782666 A, US1731352 A, US1628062 A, US1579163 A, US1454272 A, US1067669 A, US1038136 A, NL35159 C, DE676140 A,
Forward Citations:	US4591042, US3265177, US3205995,

Abstract:
Source: US3159262A 1. A money-handling device that comprises a rotatable shaft, a handle that is mounted on and that can rotate said shaft, a plurality of coin carriers that are mounted on and are rotatable with said shaft but that are spaced apart, said coin carriers normally being in a generally vertical coin-receiving position but being rotatable to a generally horizontal coin-releasing position, said coin carriers having inlet ends and outlet ends that are **open**, each of said coin carriers having a. plurality of relatively movable members that normally coact to detine a coinreceiving recess but that can be moved relative to each other to effect **opening** of said coin-receiving recess, a plurality of passageways that can receive coins from a slug reiector and that can direct said coins to said inlet ends of said coin canicrs, said passageways having the outlet ends thereof maced apart greater distances than the inlet ends thereof are spaced apart, said passagewztys having exit **openings** therefor that are adiacent but that are laterally displaced from said outlet ends of said pas~ sageways and having portions that direct coins, moving downwardly through said passageways, toward said exit **openings**, a coin-intet'cepti_ng and coin-deftecting member that is selectively movable into position intermediate saicl outlet ends of said passageways and said inlet ends of said coin carriers to intercept coins moving toward said inlet ends of said coin carriers and to detiect said coins away from said inlet ends of said coin carriers and toward said cajt **openings**, a return coin chute that is adjacent said exit **openings** and can accommodate coins passing through said exit **openings**, coin-supporting members that are smaller than said outlet ends of said coin carriers and that are removably disposable in said coin-receiving ref ccsses of said coin carriers to releasably hold coins within said eoinseceiving recesses While permitting dirt and ofaer foreign matter to fall from said outlet ends of said **openings** in said return coin chute that are are in register with said outlet ends of said as long as said coin carriers me in or are normal position and that can receive coins said outlet ends of said coin carriers when coin carriers, adjacent and coin carriers close to said issuing from said coin-supporting members are withdrawn from said coin-receiving recesses, cams that are selectively movable relative to said coin carriers to withdraw said coin-supporting members from said coin-receiving recesses as long as said coin carriers are in or are close to said normal position, said coin carriers being movable away from the paths of movement of said cams as said coin carriers rotate from said normal position to said coin-releasing position and thereby preventing withdrawal of said coinsupporting members from said coin-receiving recesses after said coin carriers have moved appreciable distances from said normal position, locking levers that are normally disposed in register with concave recesses on said coin carriers but are movable out of registry with said concave recesses by coins that are partially within said coin-receiving recesses but have the upper portions thereof extending outwardly beyond said coin-receiving recesses and overlying said concave recesses and serving as convex comming surfaces, each of snid coin carriers being adapted to accommodate -a plurality of coins and said coin-Sup porting members being disposable at diderent positions relative to said com-receiving recesses to determine the number of coins to he accommodated by said coin ear- riers, further cams that are adjacent said coinmeleasing position of said coin carriers, said further cams responding to movement of said coin carriers toward said coinreleasing position to cause said relatively movable members to move relative to each other and thereby effect: **opening** of said coin-receiving recesses, said coin carriers releasing, in broadside fashion, the coins held in said coinreeeiving recesses as said relatively movable members move relative to each other and effect **opening** of said coin-receiving recesses when said coin carriers reach said coin-releasing position, said coin carriers normally causing said coin-intercepting and coin-dellecting member to remain out of register with said outlet ends of said passageways but permitting said coin-intercepting and eoin-defleeting member to move into position intermediate said outlet ends of said passageways and said inlet ends of said coin carriers and to remain in position intermediate said outlet ends of said passageways and said inlet: ends of said coin carriers as long as said coin carriers are out of said normal position, ribs at the inner faces of said relatively movable members of said coin carriers that can engage the central portions of said coins and thereby hold the confronting edges of contiguous coins in registry, and bosses at said inner faces of said relatively movable merribers of said coin carriers that can engage the leading and trailing edges of said coins and hold contiguous coins so the planes thereof are inclined relative to each other.

PatBase - US3159262_A



159) Family number: 22920953 (US3164280A)

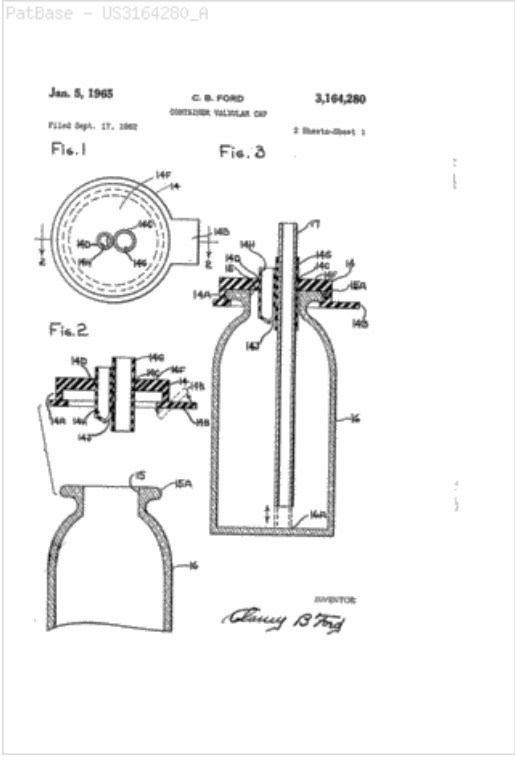
Title:	**CONTAINER** VALVULAR CAP
Priority:	US19620224145 19620917

Family:

Publication number	Publication date	Application number	Application date
US3164280 A	19650105	US19620224145	19620917

Probable Assignee:	FORD CLANCY B
Assignee(s):(std):	FORD CLANCY B
Inventor(s):(std):	FORD CLANCY B
International class (IPC 8-9):	B65D77/28 (Advanced/Invention); B65D77/24 (Core/Invention)
International class (IPC 1-7):	B65D47/32
CPC:	B65D77/28
European class:	B65D77/28
US class:	215/309
Classification Explorer	
Cited documents:	US811811 A, US3047178 A, SE152594 C1,
Forward Citations:	USD716965, US7798360, US3485404, US3430826, US3369708, US2008251517, US2007026262,

Abstract:
Source: US3164280A (Claim 1) 1. A **closure** for an **open** mouth of walled **container** comprising a plurality of rubber-like disks mounted one over another, a first of said disks having a plurality of holes therethrough, a first of said holes adapted for in-serting therethrough a suction straw and being circular and of slightly smaller diameter than the outside diameier of said straw, a second of said rubber-like disks having pierced therethrough configurations forming therein a plurality of elastic flaps located in said second disk respec-tively corresponding to locations of respective holes in the first disk and each respectively of larger surface than thereto corresponding hole, a cap-like structure housing said disks and having a top-wall and descending side-wall, the latter adapted for securing the cap-like-structure with side wall of the **container**, said top-wall having a plurality of holes therethrough corresponding respectively to the respective holes of said first disk, and a first hole in the top-wall corresponding with the first hole in the first disk and being of slightly larger diameter than the outside diameter of the suction straw, said first and second disks mounted within the side-wall of the cap-like-structure, the first disk mounted against the inner face of the top-walì of the cap-like-structure, the holes of the first disk respectively in alignment with respective holes of the top-wali, the second disk mounted over and against said first disk and facing the **container** **open** mouth, the flaps of the second disk respectively in alignment with respective holes of the first disk for respectively overlapping and **sealing** said respective holes against pressure from within the **container** and for remaining susceptible of being xorcibly flapped into **container** mouth via the respectively aligned holes in said top-wall and the first disk respectively.



160) Family number: 22427636 (US3172245A)

Title: Apparatus for **opening** and closing the transverse **sealing** jaws of a **packaging** machine

Priority: DE1962A041019 19620825

Family:

Publication number	Publication date	Application number	Application date
CH413706 A	19660515	CH19620013136	19621109
DE1411983 A1	19681024	DE19621411983	19620825
GB979944 A	19650106	GB19620047497	19621217
NL6713764 A	19671227	NL19670013764	19671010
US3172245 A	19650309	US19630267297	19630322

Probable Assignee: AQUARIUS GEB

Assignee(s):(std)**:** AQUARIUS GEB ; DEN EIJNDEN JOANNES VAN ; FRANCISCUS AQUARIUS JOANNES ; HUBERTUS AQUARIUS THEODORUS ; GEBRS AQUARIUS MASCHF

Assignee(s): MACHINEFABRIEK GEBRS AQUARIUS ; GEBR AQUARIUS

Inventor(s):(std)**:** DEN EIJNDEN JOANNES VAN ; DEN EIJNDEN JOHANNES VAN ; DEN EYNDEN JOHANNES H VAN ; F AQUARIUS JOHANNES ; FRANCISCUS AQUARIUS JOANNES ; H AQUARIUS THEORORUS ; HUBERTUS AQUARIUS THEODORUS ; JOHANNES F AQUARIUS ; THEODORUS H AQUARIUS

Inventor(s): H AQUARIUS THEODORUS ; AQUARIUS JOANNES FRANCISCUS ; AQUARIUS THEODORUS HUBERTUS ; EIJNDEN JOANNES VAN DEN ; EIJNDEN JOHANNES VAN DEN

International class (IPC 8-9): B65B65/02 (Advanced/Invention); B65B65/00 (Core/Invention)

International class (IPC 1-7): B65B65/02 F04B

CPC: B65B65/02

European class: 59A19C B65B65/02

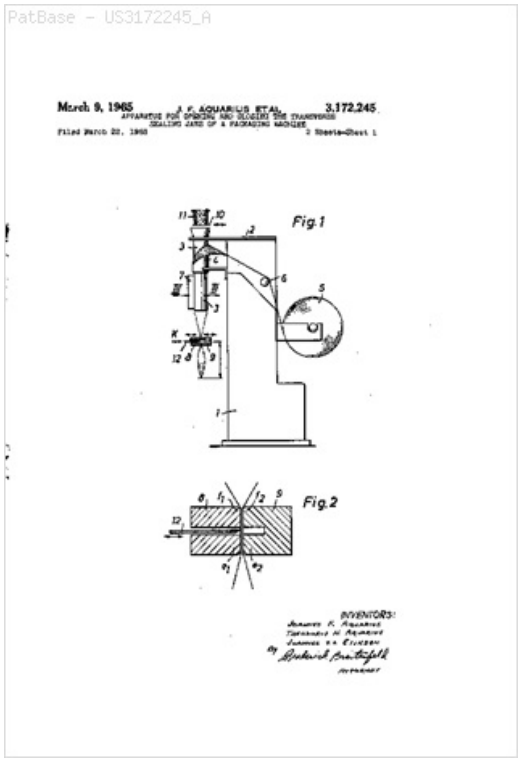
US class: 53/552

Classification Explorer

Cited documents: US3083513 A,

Forward Citations: WO8802307, US5865015, US3986921, DE4326233, DE102005010203, DE102005010203,

Abstract:
Source: GB979944A 979,944. Seaming non-metallic sheet material. AQUARIUS GEB. Dec. 17, 1962 [Aug. 25, 1962], No. 47497/62. Heading B5K. [Also in Division B8] The **sealing** jaws 8, 9 (Fig. 3), for forming transverse welds across a hot-**sealing** foil tube to produce sachets are moved into engagement by one or more hydraulic rams with their cylinders 18 connected to the **sealing** head 9 and their pistons 19 connected to the counter head 8. In the form illustrated the counter head 8 is connected through springs 22 to a member 24 carried by the piston rods 20 and supporting a knife 12 for severing the sachets. Thus an initial pressure rise in the cylinder 18 brings the heads 8, 9 together, against the bias of springs 27, to effect **sealing**, and a further rise in pressure subsequently forces the blade 12 into a slot 60 in the head 9. The initial hydraulic pressure to effect welding is provided by a pump barrel 36 (Fig. 4), operated by a cam 32 to produce a pressure in the operating conduits 30 determined by a relief valve 43. The subsequent higher pressure to effect severing is produced by a further pump barrel 47 operated by a cam 56 and is terminated either when a further cam 54 releases a valve 52, or when a solenoid-operated valve 49 is **opened** under the control of a photocell which senses markings on the foil. The cam 32, 56, 54 can be changed to produce sachets of different sizes. The transverse welding heads 8, 9 (Fig. 3), are mounted for movement on a vertical support 13 so that they serve to draw the foil downwardly. The foil is tubed around a spout delivering material (Fig. 1, not shown), and is longitudinally welded while on the spout.



161) Family number: 25834068 (US3314792A)

Title:	PHOTOGRAPHIC FILM ASSEMBLAGE INCLUDING PROCESSING LIQUID
Priority:	CH19640009925 19640729 US19630298968 19630731 US19630298969 19630731 US19650499703 19651021

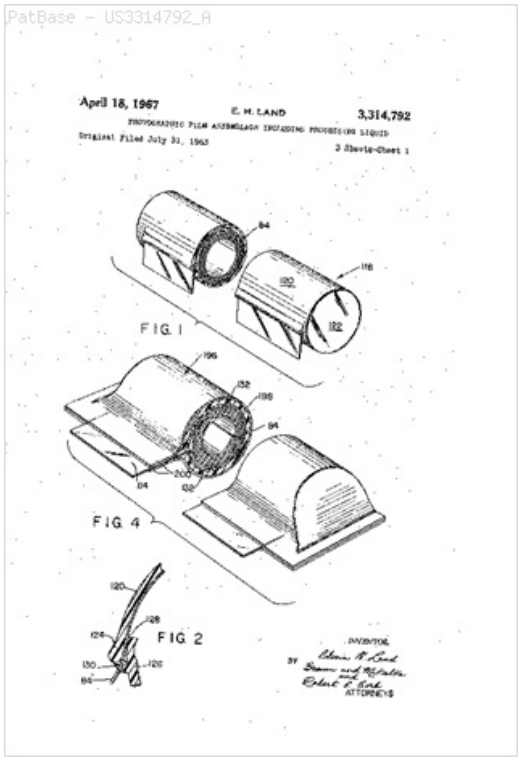
Family:

Publication number	Publication date	Application number	Application date
AT260013 B	19680212	AT19640006499	19640728
BE651210 A	19650201		19640730
BE660445 A	00000000		00000000
CH502612 A	19710131	CH19640009925	19640729
CH511451 A	19710815	CH19700008374	19640729
DE1235140 B	19670223	DE1964J029350	19640730
DE1447721 A1	19690417	DE19641447721	19640730
GB1059849 A	19670222	GB19640031556	19640804
GB1059850 A	19670222	GB19640031070	19640804
NL6408793 A	19650201	NL19640008793	19640731
SE312483 B	19690714	SE19640009145	19640728
US3229605 A	19660118	US19630298969	19630731
US3254583 A	19660607	US19630298968	19630731
US3314792 A	19670418	US19650499703	19651021

Probable Assignee:	POLAROID CORP
Assignee(s):(std)**:**	INT POLAROID CORP ; POLAROID CORP
Inventor(s):(std)**:**	EDWIN HERBERT LAND ; ELORANTA V ; ELORANTA VAITO K ; ELORANTA VAITO KALERVO ; HERBERT LAND EDWIN ; LAND E ; LAND EDWIN H ; LAND EDWIN HERBERT ; VAITO KALERVO ELORANTA ; WAITO KALERVO ELORANTA
Inventor(s):	KALERVO ELORANTA VAITO ; KALERVO ELORANTA WAITO
International class (IPC 8-9):	G03B17/30 G03B17/52 G03C8/34 G03C8/42 G03C8/50 (Advanced/Invention); G03B17/30 G03B17/48 G03C8/00 G03C8/32 (Core/Invention)
International class (IPC 1-7):	G03B17/52 G03C5/54
CPC:	G03B17/52 G03B17/30 G03C8/34 G03C8/42 G03C8/50
European class:	G03B17/30 G03B17/52 G03C8/34 G03C8/42 G03C8/50
US class:	396/33 396/387 396/395 396/41 396/605 430/207 430/210
Classification Explorer	
Cited documents:	US3073228 A, US2706937 A,
Forward Citations:	US8645500, US7958205, US7916322, US6078750, US5974263, US5943511, US5838999, US4723140, US4630915, US4630912, US4523825, US4443530, US4435062, US4429037, US4360260, US4167318, US3824953, US3387545, US2004010540, US2003184793, EP0205996,

Abstract:
Source: GB1059849A 1,59,849. Self-processing cameras. INTERNATIONAL POLAROID CORPORATION. Aug. 4, 1964 [July 31, 1963(2)], No.31556/64. Heading G2A. An exposed photographic sheet is processed within the camera by passing it between pressure rollers in contact with a second sheet having a surface layer impregnated with processing liquid, the final positive image being transferred on to said second sheet. The negative sheet 44 is housed in roll form in a chamber 42 of the camera, and is drawn along the back wall 36, where an exposure is made as it passes over the exposure **opening** 30. The sheet then passes between pressure rollers 164, 166, and so out of the camera through a slot 114. The print-receiving sheet 84, described in more detail in Specification 1, 059, 850 is housed in a chamber 82. This chamber is lined with a **sealing** material which forms a **seal** round sheet 84 as it passes out of the chamber. The back wall 36 of the camera can **open** on a hinge 40, for insertion of the negative roll 44, and the end section 16 enclosing the chamber 82 can **open** on a hinge 86 for insertion of the **container** 118. The rollers 164, 166 are normally biased out of contact, and are brought into contact only during a processing operation. This is effected by rotating a crank (176) at the top of the camera, Figs. (not shown) 2 and 4, which at the same time separates the **sealing** edges 142, 154 of the chamber lining sufficiently to allow movement of sheet 84, and also effects the actual transport of sheets 44 and 84 between the pressure rollers and out of the camera through slot 114. They can then be cut off by severing against a sharp serrated edge provided adjacent the slot.

PatBase - US3314792_A



April 18, 1967 E. H. LAND 3,314,792

PHOTOGRAPHIC FILM ASSEMBLAGE INCLUDING PROCESSING LIQUID

Original Filed July 31, 1963 2 Sheets-Sheet 1

FIG. 1

FIG. 4

FIG. 2

INVENTOR.
Edwin H. Land
By Brown and Mitchell
and
Edwin H. Land
ATTORNEYS

162) Family number: 256487 (US3168222A)

Title: DISPENSING CONTAINER

Priority: US19630251317 19630114

Family:

Publication number	Publication date	Application number	Application date
AU3715563 A1	19650506	AU19630037155	19631003
BE661301 A	19650716		19650318
DE1486422 A1	19690604	DE19641486422	19640107
GB1048481 A	19661116	GB19640000387	19640103
US3168222 A	19650202	US19630251317	19630114

Probable Assignee: ILLINOIS TOOL WORKS

Assignee(s):(std)**:** ILLINOIS TOOL WORKS

Assignee(s): ILLINOIS TOOL WORKS INC ; ILLINOIS TOOLWORKS INC

Inventor(s):(std)**:** J WANDERER HERBERT ; WANDERER HERBERT J

Inventor(s): HERBERT JOURDAN KAUDERER

International class (IPC 8-9): B65D17/00 B65D21/02 B65D47/10 B65D8/02 B65D83/06 B65D85/00 (Advanced/Invention); B65D21/02 B65D47/06 B65D8/00 B65D85/00 (Core/Invention)

International class (IPC 1-7): B65D21/02 B65D8/02 B65D85/00

CPC: B65D17/401 B65D47/10 B65D11/02 B65D21/0233

European class: B65D11/02 B65D17/16B B65D21/02F B65D47/10

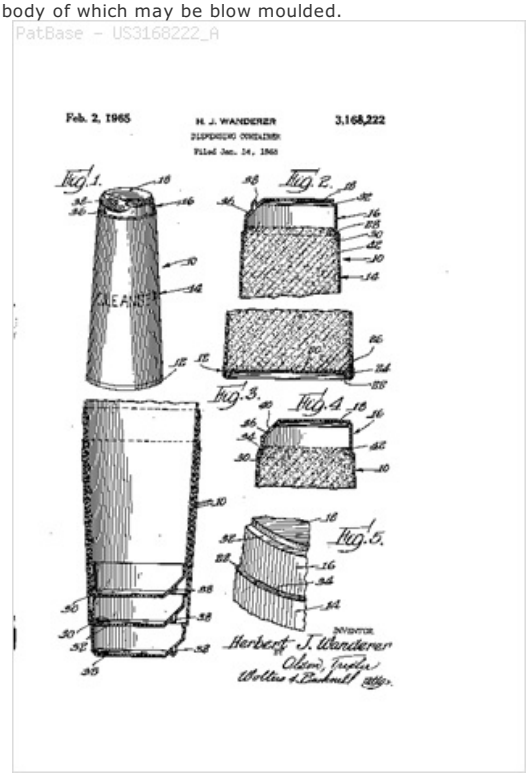
US class: 206/520 222/142.1 222/143 222/541.2 D9/905

Classification Explorer

Cited documents: US3100592 A, US3089622 A, US2893611 A, US2697635 A, US2696935 A, US1432718 A, FR1106036 A, BE530975 A,

Forward Citations: USD585294, USD571663, USD566558, USD511658, USD486702, USD484055, USD446694, USD446693, USD446692, US4793516, US4776499, US3977571, US3949877, US3841053, US3318487, US2014246458, US2007048409, US2005150803, FR2543917, EP0147725, EP0147725, EP0137997, EP0137997,

Abstract:
Source: GB1048481A A **container** for **dispensing** cleansing powder comprises a frusto-conical body of plastics having an integral upper end wall 18, Fig. 2 (not shown), and an oblique face 36 adjacent the wall 18, a protuberance 38 being provided on the face 36 in order to form a **dispensing** **opening** when the protuberance, which is thinner than the body wall, is cut off. The body wall is flexible so that it may be squeezed to pump out the powder when the **container** is no longer full. Unfilled **container** bodies may be nested, Fig. 3 (not shown), a plastics base 12 being secured to each body by adhesive after filling. **Labels** or indicia may be embossed on the base, top, or side of the **container** the body of which may be blow moulded.



163) Family number: 22587035 (US3243574A)

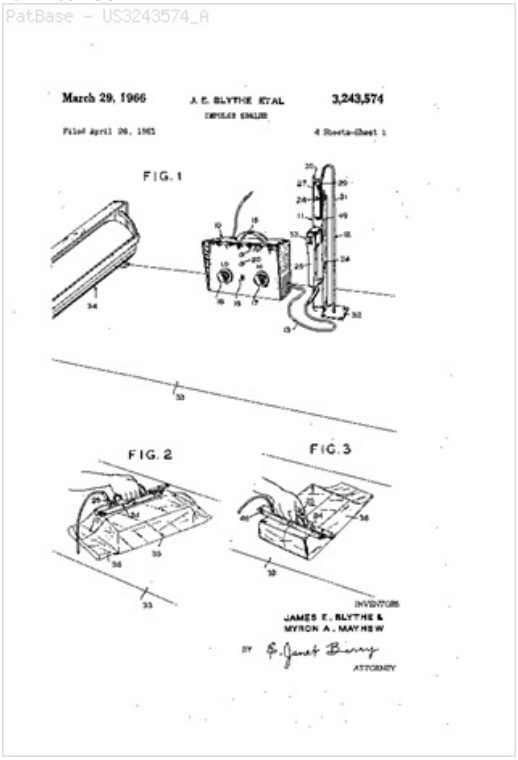
Title:	IMPULSE **SEALER**
Priority:	US19610105653 19610426

Family:

Publication number	Publication date	Application number	Application date
GB987120 A	19650324	GB19620010682	19620320
US3243574 A	19660329	US19610105653	19610426

Probable Assignee:	NAT DISTILLERS CHEM CORP
Assignee(s):(std):	NAT DISTILLERS CHEM CORP
Assignee(s):	NATIONAL DISTILLERS AND CHEMICAL CORP
Inventor(s):(std):	BLYTHE JAMES E ; MAYHEW MYRON A
International class (IPC 8-9):	B29C65/22 B65B51/10 H05B3/00 (Advanced/Invention); B29C65/00 B29C65/04 (Advanced/Non-invention); B29C65/18 B65B51/10 H05B3/00 (Core/Invention); B29C65/00 B29C65/04 (Core/Non-invention)
International class (IPC 1-7):	B29C27/06 B65B51/10
CPC:	B29C65/223 B29C65/224 B29C65/228 B29C65/229 B29C66/861 B29C65/04 B29C66/91 B29C66/929 B29C66/949 B65B51/10 B65B2051/105 H05B3/00 B29C66/818 B29C66/9241 Y10T156/18 B29C66/944 B29C66/4322 B29C66/71 B29C65/30 B29C66/1122 B29C66/232 B29C66/43121 B29C66/73921 B29C66/0044 B29C66/8122 B29C66/849
European class:	B29C65/22 B29C66/861 B29C66/90 B65B51/10 H05B3/00 L29C65/04 L29C66/91 L29C66/92 L29C66/929 L29C66/94 L29C66/949 L65B51/10C
US class:	156/579 156/583.2 219/245 219/250
Classification Explorer	
Cited documents:	US3118922 A, US3015601 A, US3008028 A, US3005402 A, US2978851 A, US2963838 A, US2932717 A, US2889672 A, US2868942 A, US2714416 A, US2708648 A, US2703133 A, US2629808 A, US2097578 A, US2008512 A, GB834882 A, GB810742 A,
Forward Citations:	US4826558, US4063069, US3992606, US3723709, US3516887, US3435188, US2009250440, GB2228709, FR2731940, EP0278927, EP0278927,

Abstract:
Source: GB987120A 987,120. Seaming non-metallic sheet material. NATIONAL DISTILLERS and CHEMICAL CORPORATION. March 20, 1962 [April 26, 1961], No. 10682/62. Heading B5K. A **sealer** for **sealing** wrapped **packages** comprises a heating member 23 mounted on a base 22, having heating element means 68 engaging the outer surface of and insulated from the member 23, and being spring-like to permit depression thereof when applied to a **package** to be **sealed**. The **sealer** head 11 is mounted on a stand 12 by a hanger 27 and connected by a cable 13 to a control **box** 10. The base 22 is made from insulating material and the heating member 23 comprises a spring strip having the ends thereof rigidly secured to the base 22. Connectors 67 on one end of the heating wires 68 engage fingers 66 on a plate 65 and connectors 94 on the other ends thereof engage tension springs 88 mounted on a plate 70 to hold the wires 68 in engagement with the member 23. Low resistance heads 91 connected to the plate 70 pass along the springs 88. High energy leads 84, 85 of the cable 13 are connected to the plate 70 and the member 23 respectively. A roll wheel 53 operates a switch 52 having a central pole 73 to selectively engage either of contacts 74, 75. If it is desired to apply a large pulse of current for a short time to the wires 68 a control dial 16 is suitably adjusted and the roll wheel 53 rotated to the " low " position. If this heat is insufficient, the wheel 53 is rotated to the " high " position so that current flows for a longer period of time, this being adjusted by a control 17. The electrical control circuit is described in the Specification. To resist the adhesion of the member 23 to the thermoplastic film to be **sealed** it is **covered** preferably with a plastic-coated glass fibre fabric 96. The heater wires 68 are preferably made of a nickelchrome alloy, are 1/16 inch wide and 0.0005 inch thick and have a resistance of 1.723 ohms pe foot. The wires 68 are also coated, preferably with polytetrafluoroethylene. In a modification, Fig. 12, a snap switch 175 is set to either the " high " or " low " position before use and during **sealing** the operator depresses a switch 177 to supply current to the wires 190.



164) Family number: 22679832 (US3176727A)

Title:	PRESSURE FILLER HEAD HAVING A UNIVERSAL ADAPTER HOLDER AND ADAPTERS FOR PRESSURE FILLING VALVED AEROSOL **CONTAINERS**
Priority:	US19610149418 19611101

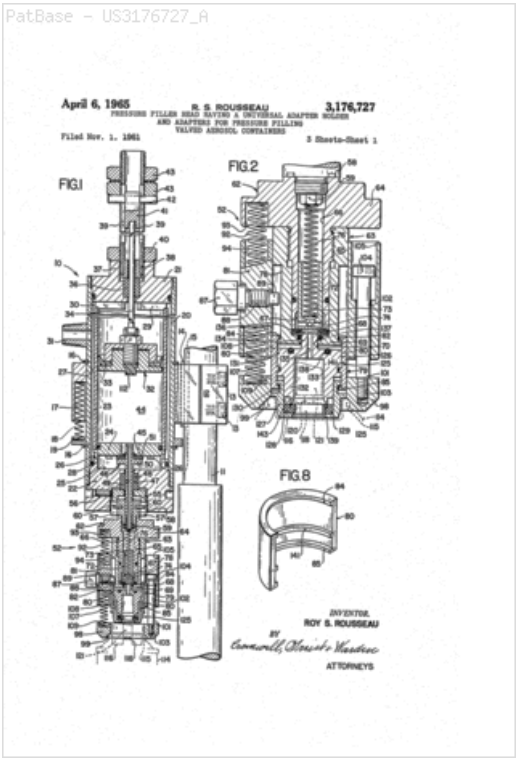
Family:

Publication number	Publication date	Application number	Application date
US3176727 A	19650406	US19610149418	19611101

Probable Assignee:	KARTRIDG PAK CO
Assignee(s):(std):	KARTRIDG PAK CO
Assignee(s):	THE KARTRIDG PAK CO
Inventor(s):(std):	ROUSSEAU ROY S
International class (IPC 8-9):	B65B31/00 (Advanced/Invention); B65B31/00 (Core/Invention)
International class (IPC 1-7):	B65B31/04
CPC:	B65B31/003
European class:	B65B31/00A
US class:	141/177 141/20 141/349 251/149.6
Classification Explorer	
Cited documents:	US3103956 A, US3027922 A, US3013591 A, US2989993 A,
Forward Citations:	US9783406, US8002000, US7972064, US7959041, US7730911, US7523767, US7357276, US7124788, US6984278, US6715644, US6279623, US6161599, US6152190, US4903741, US4286636, US3654743, US3601164, US3473782, US3354916, US3348587, US2017066644, US2010051653, US2007217718, US2007025648, US2007006938, US2007006937, US2006131328, US2005242114, US2005005995, US2004003864, US2003136798, US2003127178, US2003089737, DE3445977,

Abstract:

Source: US3176727A (Claim 1) A pressure fuler head for filling a metered quantity of pressurized fluid into an aerosol **container** through the valve ass-_mbly th-.reof comprising, a **dispenser** having a charnber of F,,redeterrnined size for receiving a m-,tered char.-e of fluid Linder pressure, a tubular adapter holder body dep-.nd;ng from said **dispenser** a-_id having a disc_ii,,ir,-, pa_,sage exending therethrough wth its iipper epd op_-n to said ch,,imber, a normally closed diseharge valve meriiber ir_ the lower end of said d_scharge passage, means for co-iinecting a sot:irce of fluid ur.,Jer pressure in contirubus compirn_'_e2ition witli said disoc_nser, m-,ars ineltiding a normally **open** valve at the upper end of said discbarge pa_-sage for establish,'_ng said metered charge in said chamber iv'-Qeii the filler he_ad is out ofen.-ageni._nt wi,h a valved aerosol contair_er, an -,dapter having means for seai;,ng engageiiicnt on a valved aerosol corilainer rer_iova_oly susp-.nded fron-i the lower end of sf,.id ,idaoter holder body, said adapter being slid_ble on said holder body so, as to permit upward movenient of s-,dd adapter relai-'_ve to _said body, said adat)ter having a d,'_scharge passage extending therethrough a-,id commurlc,,iting with the lov/er end of said dischara passa-c in 6o _-aid a-',ti3ter holder body, readily releasabl-_ me_ans for su_.rondi-_ig said ad-,tpter from s-,id adtpter holder body, riie,,Liis tor closin.- thz valv- at the upper eiid of said disebar,-e, passageway and isolating said chamber and th_m-,tered ch,,ir-O thereiti from said fluid solirce upon initial rzr-igigement of the '_Uler head N_7ith the top of a valved arcosol conta-_'ner, ,nd a ce- .itrally loc-,tt-_d upsta-_iding steni 'd adan on sa, _er slidably received in th-.lovver end of saidclis-,hargp. passage in said adarter holder body and operable upon Lipwarcl mov-,r.-e-tit of said adapter relative to said adapter holder 'Uody _afte.- said adapt-Ir is scalin,-Iy e-_igaged w,.Lh the top of an aerosol c6-_i_ainer f or e.,igaging aiid **opening** s,_i;d norm-ally clos-ld e_i_.charge valve r.,i-niber in the lowei7 enct oi sa:ld discharge pas.s,,igeway whereby aid metered c,iarge of p-ressuriz-d fiuid is discharged 7 5 s lito the arcosol **container** through said adapter and the **container** valve ass6n-iblv.



165) Family number: 29897802 (US3228171A)

Title:	**PACKAGING** MACHINE
Priority:	US19620228687 19621005

Family:

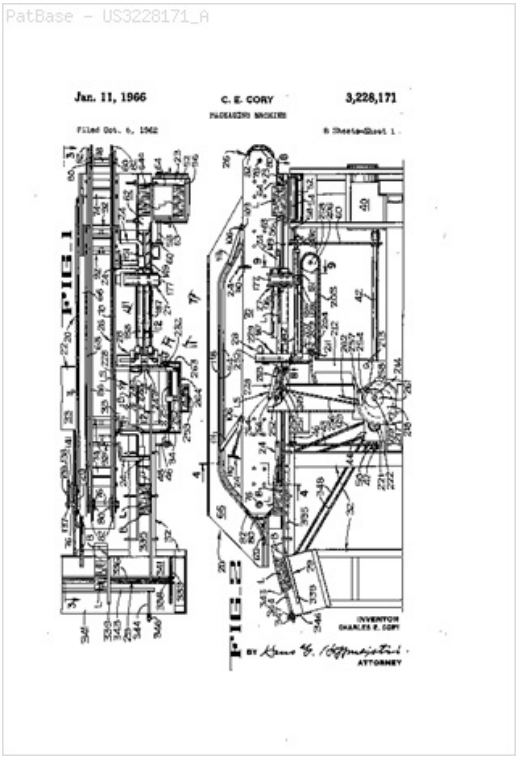
Publication number	Publication date	Application number	Application date
DK114186 B	19690602	DK19630004685	19631004
GB988997 A	19650414	GB19630037642	19630925
US3228171 A	19660111	US19620228687	19621005

Probable Assignee:	FMC CORP
Assignee(s):(std)**:**	FMC CORP
Inventor(s):(std)**:**	CORY C ; CORY CHARLES E
Inventor(s):	CHARLES ERNEST CORY
International class (IPC 8-9):	B65B25/18 (Advanced/Invention); B65B25/00 (Core/Invention)
International class (IPC 1-7):	B65B25/18
CPC:	B65B25/18
European class:	B65B25/18
US class:	198/732 198/740 53/259 53/260 53/570

Classification Explorer

Cited documents:	US2973611 A, US2952954 A, US2685995 A, US2035259 A, US1843453 A,
Forward Citations:	USRE28350, US9731848, US6755008, US4440294, US4393838, US4379383, US4101020, US4015402, US3868807, US3603059, US3579948, US3527337, US3504784, US3369339, EP1221410,

Abstract:
Source: GB988997A 988,997. **Packaging**-machines. FMC CORPORATION. Sept. 25, 1963 [Oct. 5, 1962], No. 37642/63. Heading B8C. Loaves to be **packaged** are fed on a continuously moving endless conveyer 23 to a table 62 and into the path of cam-controlled pushers 24 moved continuously by means of endless chains 82, each loaf entering a reciprocating carrier 27 which travels with the loaf into an **opened** **bag** B at a loading station LS, the carrier 27 then withdrawing as the pusher 24 removes the partially-**packaged** loaf to a discharge conveyer 29 leading to tying mechanism (not shown). The sliced loaves are impelled by bars 56 secured to belts 52 which form the conveyer 23. Guide rails 63, 64 keep the loaves compact, the end 64a of the rail 64 being flexible. A cam track 114, Fig. 2, controlling the position of the pushers 24 has a raised return portion 118 **opened** and closed by cam-operated gates 120 at either end. The loaves are pushed along rails 149, 151 to the loading station, the rail 151 being laterally adjustable. Flexible fingers mounted on the rails 149, 151 hold the loaves together. The carrier 27 has **bag**-supporting shields 187, 188, and shoes 1, Fig. 9 (not shown), on to which each loaf is pushed by one of the members 24 after it leaves the rails 149, 151. The carrier 27 is moved by an endless chain 203 at the same speed as the chains 82 carrying the pushers. Supplying and **opening** **bags**.-Collapsed **bags** B of polythene are supplied on an intermittently moving conveyer 22 on which they are held by suction. The **bags** are **opened** by a suction cup assembly 228, the lower tip of the **bag** being held by a gripper 227, Fig. 11, formed by pivoted members 234, 236. The assembly 228 includes movable heads 247, 248, Fig. 1. Curved members 271, 272 for spreading the **bag** are welded to shafts 277, 278 respectively and moved pneumatically through members 283-289 into the **bag** mouth, Figs. 12 and 13 (not shown).



166) Family number: 32957 (US3439468A)

Title: METHOD OF MANUFACTURING **BAG** **CLOSURES**

Priority: GB19640044117 19641029 NL19630299956 19631031 NL19640002381 19640309

Family:

Publication number	Publication date	Application number	Application date
BE655188 A	19650503		19641103
GB1080377 A	19670823	GB19640044117	19641029
LU49736 A	19651228	LU19650049736	19651028
NL6402381 A	19650910	NL19640002381	19640309
US3439468 A	19690422	US19640408158	19641102

Probable Assignee: BOK EDWARD

Assignee(s):(std)**:** BOK EDWARD

Assignee(s): EDWARD BOK

Inventor(s):(std)**:** BOK EDWARD

Inventor(s): EDWARD BOK

International class (IPC 8-9): B31B19/60 B65B51/06 B65B9/20 B65D33/16 B65D75/68 B65D77/10 (Advanced/Invention); B65B9/20 (Advanced/Non-invention); B31B19/00 B65B51/00 B65B9/10 B65D75/52 (Core/Invention)

International class (IPC 1-7): B65B51/06 B65B51/30 B65B61/18 B65B9/10 B65B9/12 B65C7/00 B65D33/16

CPC: B65D77/10 B65B51/06 B65D33/16 B65D33/1691 B65B9/213 B65B9/2056 B65B51/062 B65D75/68 B31B70/004

European class: B31B19/60 B65B51/06 B65B51/06B B65B9/20D B65B9/213 B65D33/16 B65D33/16H B65D75/68 B65D77/10 L31B219/29 L65B9/20T

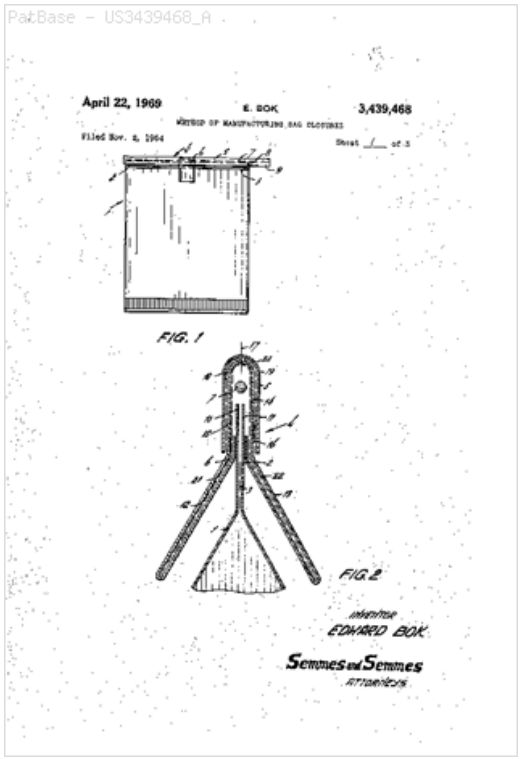
US class: 383/204 383/206 383/210 383/210.1 383/35 383/5 383/78 53/133.4 53/133.7 53/14 53/412 53/415 53/468 53/548

Classification Explorer

Cited documents: US3173232 A, US3116009 A, US3045890 A, US3021652 A, US2977729 A, US2929180 A, US2740244 A,

Forward Citations: US8523437, US7320545, US7165887, US7086782, US6913387, US6910806, US6588177, US6360513, US5493842, US5405198, US5127208, US4426035, US2017166357, US2006115188, US2003113415, US2003096042, US2003072852, US2001017947, EP0776828, EP0776828,

Abstract:
Source: US3439468A ABSTRACT OF THE DISCLOSURE
The present invention relates to a **bag** **closure** and method of manufacture, particularly a method of manufacturing a **resealable** **bag** using pressure sensitive adhesive as a **resealing** means and including tear strip pressure sensitive cutting means and reinforced pull **tab** **open**-



167) Family number: 22724061 (US3181529A)

Title:	VALVED BODY-FLUID SAMPLING TUBES
Priority:	US19620213487 19620730

Family:

Publication number	Publication date	Application number	Application date
US3181529 A	19650504	US19620213487	19620730

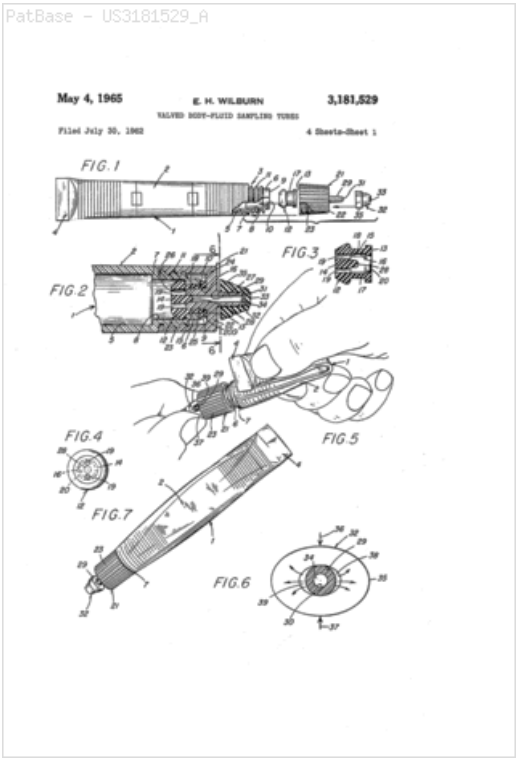
Probable Assignee:	WILBURN EDGAR H
Assignee(s):(std):	WILBURN EDGAR H
Inventor(s):(std):	WILBURN EDGAR H
International class (IPC 8-9):	A61B5/15 (Advanced/Invention); A61B5/15 (Core/Invention)
International class (IPC 1-7):	A61B5/14
CPC:	A61B5/15003 A61B5/150099 A61B5/150221 A61B5/150351 A61B5/150366 A61B5/150389 A61B5/150519 A61B5/150992 A61B5/153 A61B5/154 A61B5/154 A61B10/0045
European class:	A61B10/00L A61B5/14B A61B5/153 A61B5/154 A61B5/15B12 A61B5/15B16 A61B5/15B18B10D A61B5/15B18B2 A61B5/15B2D A61B5/15B4B10 A61B5/15B8D A61B5/15H
US class:	222/519 600/577 600/579 600/580 604/213

Classification Explorer

Cited documents:	US3081921 A, US3013557 A, US3010619 A, US2936935 A, US2907326 A, US2805800 A, US2759643 A, US2661740 A, DE532192 A,
Forward Citations:	WO8300281, US5114679, US4650475, US4529402, US4460354, US4411163, US4392499, US4333479, US4298000, US4296759, US4250893, US4202333, US4198974, US4186752, US4172448, US4106491, US3996923, US3906930, US3867923, US3712295, US3513829, US3460529, US3459183, US3459177, US3420224, US3322114, US3310048, US2007225668, FR2441150, FR2398506, EP0031900, EP0029126,

Abstract:

Source: US3181529A 1. A body-fluid sampling tube comprising, in combination, ' (Ll) a receptacle having a suction chamber evacuated to a relatively high degree of evacuation sufficient »to suck thereinto body tluid from a cavity in and the circulatory system of a person's body when com- . municated thereto; (b) said receptacle having a tubular end defining a suction inlet passage communicating with the chamber for this purpose, _ i (c) **closure** means movably mounted to said tubular end for axial translation relative thereto and having a central through longitudinal passage for sup- _ ply of body-fluid to the inlet passage, (cl) said receptacle tubular end and **closure** means having a pair of telescoped tubular parts respectively connected in liuid-tight manner thereto with one of said parts mounted in the other for relative axial translation between inward relative valve-closing positions and outward relative valve-**open** positions, (e) said telescoped tubular parts carrying at the inner s end of the **closure** supply passage complementary valve structures cooperatively engaged in llow blocking relation to form a closed valve in the inward valve-closing axial position of one of said telescoped tubular parts relative tothe other preventing leak-' age, of atmospheric air to said evacuated suction chamber through the **closure** supply passage and axially separable -in How permitting relation when one of said telescoped tubular parts isretracted to its outward valve-**open** position relative to the other r to apply suction to the **closure** supply passage. , (f) fluid-tight .**sealing** means interposed between said pair of telescoped tubular, parts at a point outward , of said valve in the form before assembly of parts of an annular transversely extending riby means of 3,iS1,529 E3 relatively high elasticity carried by one of said pair of telescoped tubular parts in a fixed axial location thereon and confined after assembly of parts in distorted compressed condition between said pair oi tclescopcd parts in a relatively narrow annular zone to limit drag resistance to relative longitudinal sliding action of said pair of telescopcd parts, said compressed rib means being under appreciable compression of a degree sufficient to prevent leakage therepast of surrounding atmospheric air into the evacuated suction chamber While body iiuid is sucked into the latter through the **closure** supply passage, said teiescoped tubular parts being freely slidable manually relative to each other at all points of opposition axially offset frorn the location of said compressed rib means, and (g) manually manipulative camming means temporarily locking said pair of telescoped tubular parts in their rclalive valve-closing positions and to permit release for relative retraction to their valve-**open** positions.



168) Family number: 21168852 (FR1399493A)

© PatBase

Title: SYSTEME D'OUVERTURE POUR EMBALLAGES SCELLES, PROCEDE ET DISPOSITIF POUR SA FABRICATION **OPENING** SYSTEM FOR **SEALED** **CONTAINERS**, METHOD AND DEVICE FOR MANUFACTURING (Machine translation)

Priority: FR19640979732 19640626

Family:

Publication number	Publication date	Application number	Application date
FR1399493 A	19650514	FR19640979732	19640626

Inventor(s):(std): YAMAMOTO HEIHACHIRO

International class (IPC 8-9): B65B61/02 B65D75/58 (Advanced/Invention); B65B61/00 B65D75/52 (Core/Invention)

International class (IPC 1-7): B29C24/00

CPC: B65B61/02 B65D75/5816

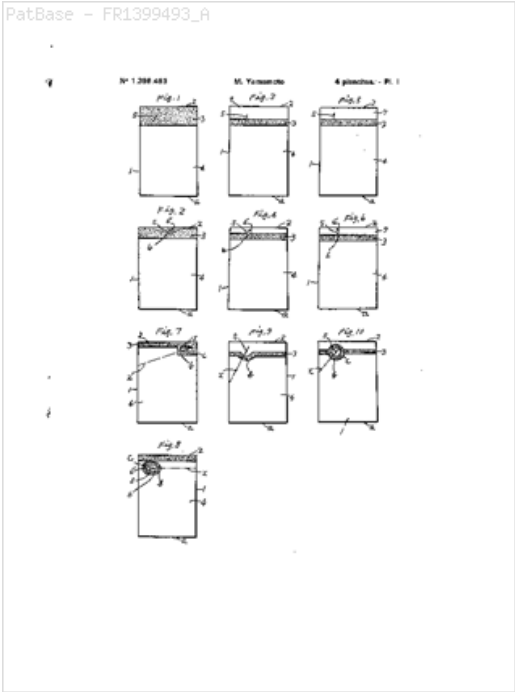
European class: B65B61/02 B65D75/58D

Classification Explorer

Forward Citations: WO03066472, US8066120, US7757855, US6679629, GB2473546, GB2473546, EP1480895, EP1103485, AU2003210960,

Abstract:
Source: FR1399493A (Claim 1) 1 Un systeme d'ouverture d'emballages scelles qui comporte une fente comprise entre le bord superieur de l'emballage et le bord inferieur. du scelle- ment, ladite fente etant dirigee vers le contenu de l'emba'llage;

Machine translation: (Claim 1) 1 A system for **opening** **sealed** **packaging** that has a slot between the upper edge of the **packaging** and the bottom edge. the **seal**-ing, said slot being directed towards the content of emba'llage



169) Family number: 22744874 (US3185578A)

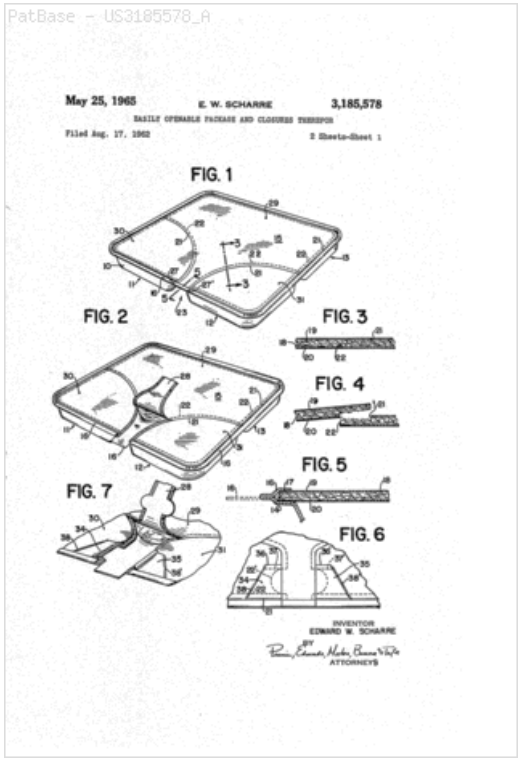
Title:	EASILY **OPENABLE** **PACKAGE** AND **CLOSURES** THEREFOR
Priority:	US19620218483 19620817

Family:

Publication number	Publication date	Application number	Application date
US3185578 A	19650525	US19620218483	19620817

Probable Assignee:	ANACONDA ALUMINUM CO
Assignee(s):(std)**:**	ANACONDA ALUMINUM CO
Assignee(s):	ANACONDA ALUMINUM COMPANY ; ATLANTIC RICHFIELD CO ; ATLANTIC RICHFIELD CO A PA CORP
Inventor(s):(std)**:**	SCHARRE EDWARD W
International class (IPC 8-9):	B65D5/54 B65D77/20 B65D81/34 (Advanced/Invention); B65D5/54 B65D77/10 B65D81/34 (Core/Invention)
International class (IPC 1-7):	B65D5/54 B65D81/34
CPC:	B65D17/404 B65D77/2008 B65D2577/205 B65D2577/2091
European class:	B65D17/24 B65D77/20B1 L65D577/20M1 L65D577/20P2
US class:	229/123.2 229/125.35 229/125.36 229/207 426/114 426/122
Classification Explorer	
Cited documents:	US3054680 A, US2878128 A, US2858057 A, US2608341 A, US2073635 A, GB274556 A,
Forward Citations:	US8776660, US8545099, US8460773, US7175731, US6093430, US5516035, US5326022, US5190777, US5042681, US4858821, US4351473, US4292332, US4154853, US3982685, US3958748, US3905646, US3870219, US3741427, US3650391, US3650390, US3438565, US3428460, US3404988, US3394869, US3352226, US3344974, US3244356, US2013056469, US2008138473, US2006065357, US2004134320, GB2156660, FR2713200, EP1382544, EP0757601, EP0757601, DE2140733, DE1300061,

Abstract:
Source: US3185578A (Claim 1) 1. An easily **openable** **container** **closure** comprising: (a) a paper-board **closure** member, (è) a first pair of cooperating score lines cut into said member and extending in the plane of said member substantially around its peripheral marginal portion, and (c) a second pair of cooperating score lines cut into said member and extending in the plane of said member generally spaced from the peripheral marginal portion thereof but substantially intersecting said first pair of score lines at one point thereof and associated with said first pair of cooperating score lines to permit removal of at least a portion of said member, said pairs of cooperating score lines being cut into but not through said member from opposite sides thereof with each score line on one side generally registering with but slightly offset from a corresponding score line on the other side whereby said member is separable along a portion thereof between the cooperating score lines, and {d) **tab** means at the intersecting point and defined along a portion of the **cover** wherein the score lines of the respective first and second pairs of score lines which are cut into the inner side of the **cover** lie between score lines of the respective first and second pairs of cooperating score lines cut into the outer side of the **cover**, and said **tab** defined by a first cut extending from an edge of the **closure** to said first pair of cooperating score lines and a second cut peripherally spaced from the first cut and extending from the edge of the **closure** to said second score line at said intersecting point to define a **tab** extending inwardly from the edge of the **closure** to said second score line at said intersecting point to define a **tab** extending inwardly from the edge of the **container** and terminating at the peripheral extent of the first score lines, whereby said **closure** is free from any **openings** extending completely therethrough along that portion of the **closure** inward of the first pair of score lines and tearing of the **closure** is initiated by lifting said **tab** means so that the **cover** separates along said portion thereof between said pairs of cooperating score lines.



170) Family number: 22752817 (US3187646A)

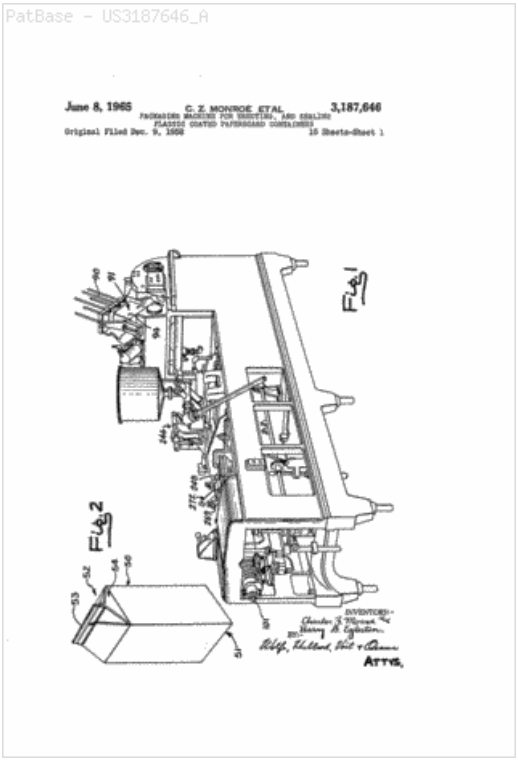
Title:	PACKAGING MACHINE FOR ERECTING AND SEALING PLASTIC COATED PAPERBOARD CONTAINERS
Priority:	19591204 US19610142299 19611002

Family:

Publication number	Publication date	Application number	Application date
US3187646 A	19650608	US19610142299	19611002

Probable Assignee:	EX CELL O CORP
Assignee(s):(std):	EX CELL O CORP
Inventor(s):(std):	MONROE CHARLES Z ; EGLESTON HARRY B
International class (IPC 8-9):	B65B3/02 (Advanced/Invention); B65B3/00 (Core/Invention)
International class (IPC 1-7):	B65B3/02
CPC:	B65B3/025
European class:	B65B3/02C
US class:	493/164 493/184 493/310 53/370.6 53/370.8 53/381.1
Classification Explorer	
Cited documents:	US3021768 A, US2841942 A, US2822653 A, US2798349 A, US2770175 A, US2669815 A, US2357535 A,
Forward Citations:	WO17174497, WO17174280, US7459133, US7399261, US6357203, US5538236, US5033975, US4619637, US4104849, US3956872, US3872646, US3593625, US3516336, US3408906, US3398659, US2005250633, US2004191115, JP51044084,

Abstract:
Source: US3187646A (Claim 1) 1. In a.machine for erecting and sealing the closure reflectors, and a safety..switch (not shown) prevents the - elements of containers having thermoplastic material on actuation of the motors to place the tunnels in operative 5.3 the surfaces thereof, each. said container having an end position when, for example, the sealing temperature is closure including a pair of opposed guter closure flaps not reached or the sterilizing bath water is not hot. - and a pair of opposed infoldable triangular panels, the By way of summary it may be helpful at this point combination cornprising a mandrel, means for presentto review the steps of the squaring of the blank, compie- ing the container in open-ended tubulaer form in aligntion of .the bottom closure, filling, and sealing of the top 55 ment wtih said mandrel, movable abutment means for closure in the process of producing a completed package. telescoping said tubulaer- form container over said manThis sequence of steps is shown in Fig. 33.



171) Family number: 25049809 (US3221469A)

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Title: METHOD AND APPARATUS FOR FORMING TETRAHEDRON SHAPED **PACKAGES**

Priority: US19620181403 19620321

Family:

Publication number	Publication date	Application number	Application date
CH415425 A	19660615	CH19630003541	19630320
DE1486019 A1	19691030	DE19631486019	19630315
DK112156 B	19681111	DK19630001296	19630321
GB994941 A	19650610	GB19630001125D	19630321
NO116280 B	19690224	NO19630147777	19630305
SE313015 B	19690728	SE19630003039	19630320
US3221469 A	19651207	US19620181403	19620321

Probable Assignee: PACKAGING FRONTIERS INC

Assignee(s):(std)**:** PACKAGING FRONTIERS INC ; PACKAGING FRONTIERS S A ; PACKAGING FRONTIERS SA

Inventor(s):(std)**:** MURRAY JOHN H ; MURRAY J ; JOHN H MURRAY ; H MURRAY JOHN

Inventor(s): JOHN HUNTER MURRAY

International class (IPC 8-9): B65B41/18 B65B9/20 B65B9/213 (Advanced/Invention); B65B41/00 B65B9/10 (Core/Invention)

International class (IPC 1-7): B65B41/18 B65B9/08 B65B9/10

CPC: B65B9/2021 B65B9/213 B65B9/2035 B65B9/2056 B65B41/16 B65B41/18

European class: B65B41/16 B65B41/18 B65B9/20M B65B9/20N B65B9/213

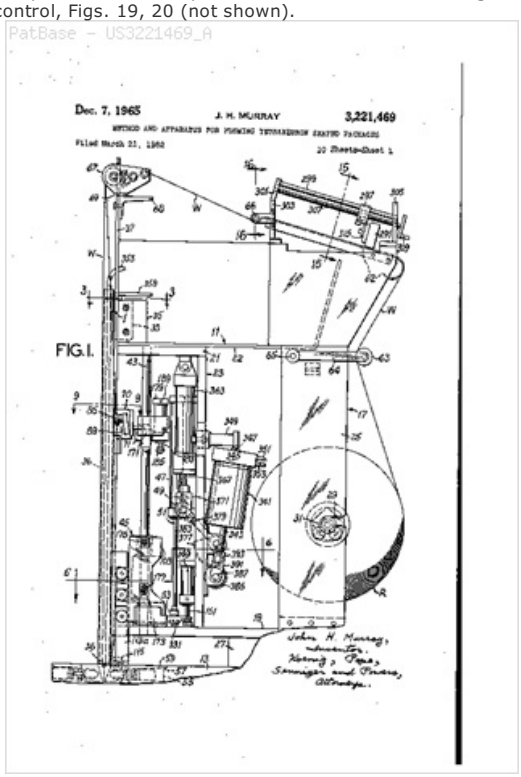
US class: 53/451 53/479 53/552

Classification Explorer

Cited documents: US3091902 A, US3082586 A, US3071907 A, US3027695 A, US3026658 A,

Forward Citations: USRE33467, US6098380, US4881360, US4825625, US4817366, US4485613, US3599387, US3546835, US3529397, US3332206, US3332198, US3320719, JP5164551, JP2009143620, GB2260114, GB2178694, GB2178694, FR2677606, EP3048056, EP1783052, EP1145956, EP0232220, BE1004578, AU588074,

Abstract:
Source: GB994941A 994,941. **Packaging** machines. **PACKAGING** FRONTIERS S.A. March 21, 1963 [March 21, 1962], No. 11225/63. Heading B8C. In a machine in which a web is tubed about a mandrel, the tube being drawn intermittently downwards, increments of contents being fed in and then isolated by transverse **seals**, the transverse **sealing** is carried out while the tube is stationary and the means forming the longitudinal seam also feeds the tube along the mandrel. Successive transverse **seals** may be at right angles to form tetrahedron **packages**. The web W, thermoplastic coated on one side, passes from a roll R beneath photoelectric scanning means 291 to be wrapped round the mandrel 1 by spring-loaded rollers 85 which form a projecting fin seam. This is grasped by heat-**sealing** jaws 3A, 3B, Figs. 6, 22, mounted on a carriage 45 reciprocating along a guide 43 between limit switches 171, 173, Fig. 1, the upper being adjustable to vary stroke and thus **package** length. A roller 115 folds down the fin **seal** against the mandrel. The tubed web passes through an aperture 61 in a plate 59 in which are mounted two pairs of transverse **sealer** jaws combined with cutters, 5 (A-D), the pairs operating alternately to produce **seals** at right angles. When desired, one pair. may be rendered inoperative so that ordinary flat **packages** are produced. The contents is fed into the tube through a pipe 353 connected to a reciprocating pump 341, Fig. 1, driven by a pneumatic motor 363. Compressed air may be fed into the mandrel to prevent light powdered materials drifting upwards round the filler pipe. The throw of pumps operating crank 391 is adjustable to vary the charge. The mandrel 1 is readily replaceable by one of different size. Transverse **seal** and print synchronization.- The web W carries index marks, corresponding to **package** lengths, which interrupt the normal reflection of a light beam from the photoelectric **unit** 291. The travel of the carriage 45 is arranged to be slightly in excess of the **package** length so that an index mark is gradually advanced until it actuates the **unit**, causing a stop 331, Figs. 1, 7, to be interposed between a plate 19 of the machine structure and a portion 106 of the carriage. The travel is thus temporarily limited and the **seal**-print relationship restored. The **unit** 291 is adjustable both longitudinally and transversely relative to the web. All moving parts of the machine are operated by pneumatic motors under electrical control, Figs. 19, 20 (not shown).



172) Family number: 22762507 (US3190437A)

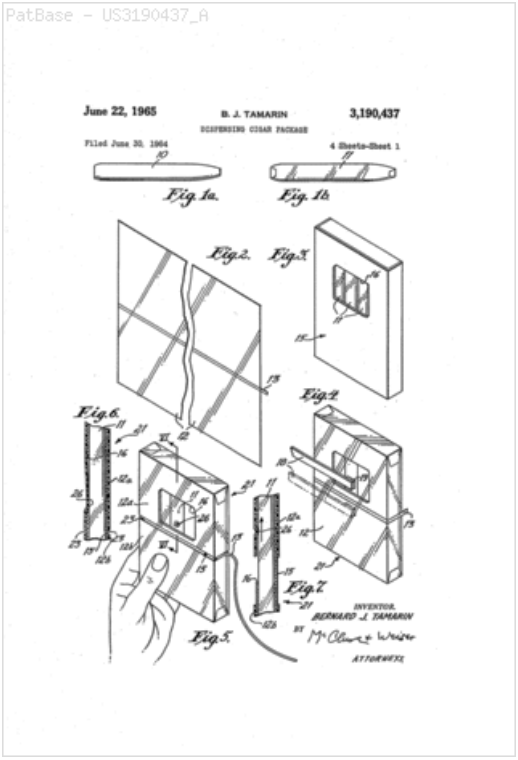
Title:	**DISPENSING** CIGAR **PACKAGE**
Priority:	US19640379146 19640630

Family:

Publication number	Publication date	Application number	Application date
US3190437 A	19650622	US19640379146	19640630

Probable Assignee:	PULL PACKAGING INC
Assignee(s):(std):	PULL PACKAGING INC
Inventor(s):(std):	TAMARIN BERNARD J
International class (IPC 8-9):	B65D5/72 B65D77/36 B65D85/12 (Advanced/Invention); B65D5/72 B65D77/22 B65D85/08 (Core/Invention)
International class (IPC 1-7):	B65D85/10
CPC:	B65D5/721 B65D77/36 B65D85/12
European class:	B65D5/72B B65D77/36 B65D85/12
US class:	206/264 221/1 221/250 221/302 221/32
Classification Explorer	
Cited documents:	US2361580 A, US1670343 A,
Forward Citations:	USD649032, USD609398, USD596787, US6247595, US2015021380, EP0854096,

Abstract:
Source: US3190437A (Claim 1) Method of **dispensing** generally cylindrical artigles from a **package** having an **opening** through a side wall alongside at least one of the axticies;and having in aii end wall an **openable** portion through wllich such an article may be **dispensed**, comprising sheathing at least the openin,_ and the **openable** POTtiOn of the **package** v/ith a lam-inar material, bonding a portion of the sheath so formed to at least one of the articles through the op_-ning, and removin._ at least part of the sheath including the bonded portion in a direction to propel the article bonded thereto against the **openable** j)ortion of the **package** to **open** it.



173) Family number: 856284 (US3429475A)

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Title: CAN

Priority: US19600043574 19600718

Family:

Publication number	Publication date	Application number	Application date
GB998473 A	19650714	GB19610025864	19610717
GB998474 A	19650714	GB19640039654	19610717
US3429475 A	19690225	US19600043574	19600718

Probable Assignee: NAT CAN CORP

Assignee(s):(std)**:** NAT CAN CORP

Assignee(s): NATIONAL CAN CORP ; AMERICAN NATIONAL CAN CORP

Inventor(s):(std)**:** SCHOLTZ ARTHUR P

Inventor(s): ARTHUR P SCHOLTZ

International class (IPC 8-9): B65D21/02 B65D43/02 B65D51/18 (Advanced/Invention); B65D21/02 B65D43/02 B65D51/18 (Core/Invention)

International class (IPC 1-7): B65D11/06 B65D17/06 B65D21/02 B65D51/18

CPC: B65D21/022 B65D43/021 B65D51/18 B65D2251/0009 B65D2251/0018 B65D2251/0081 B65D2543/00092 B65D2543/00296 B65D2543/0037 B65D2543/00435 B65D2543/00509 B65D2543/00537 B65D2543/00546 B65D2543/00555 B65D2543/00648 B65D2543/00685 B65D2543/00731 B65D2543/00814 B65D2543/00851

European class: B65D21/02E7B B65D43/02S3D B65D51/18 L65D251/00Y2A L65D251/00Y2F L65D251/00Y6F L65D543/00Y10B4 L65D543/00Y1F2C L65D543/00Y1M6 L65D543/00Y2F L65D543/00Y6 L65D543/00Y8D1C L65D543/00Y8D3 L65D543/00Y8D3N L65D543/00Y8D5 L65D543/00Y8S1B8 L65D543/00Y8S1D2 L65D543/00Y8S3B2 L65D543/00Y8S3D6

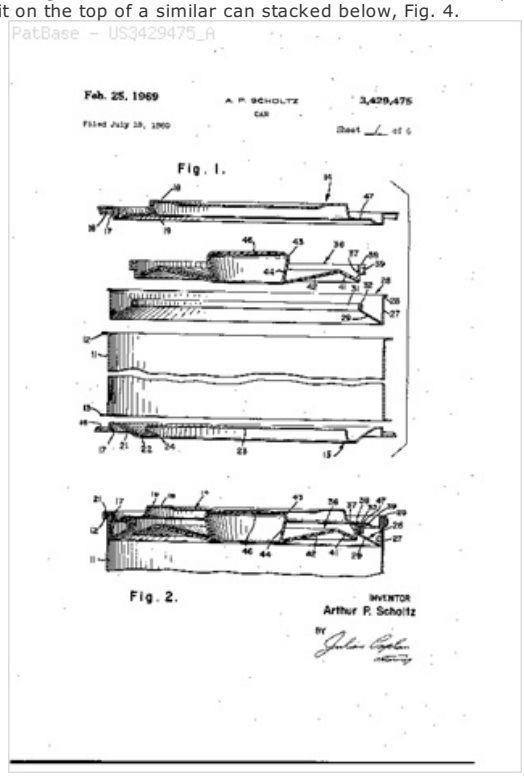
US class: 206/508 220/257.1 220/29 D9/454

Classification Explorer

Cited documents: US2833452 A, US2833324 A, US2773622 A, US2575770 A, US2523285 A, US2104540 A, US1856941 A, US1695286 A, US1396065 A, GB725882 A,

Forward Citations: WO0013985, US9265287, US8701887, US8517176, US8205749, US4363404, US4355742, US3680828, US2014262870, US2011315567, US2011315566, US2010025281, US2010025279, US2010018889, FR2433464, EP1119495,

Abstract:
Source: GB998473A 998,473. Metal cams; **container** **closures**. NATIONAL CAN CORPORATION. July 17, 1961 [July 18, 1960], No. 25864/61. Headings B8D and B8T. A metal can is formed with a collar 26 on which a **closure** 36 is seated, the **closure** 36 being replaceable once the can has been **opened** by cutting out an end 14 seamed to the can wall. The **closure** 36 is of plastics, e.g. polystyrene, and is designed to flex the end 14 upwards as the end is cut out. The **closure** 36 may have protrusions lying within the inverted U of its rim which provide vent **openings** for the escape of gas, Fig. 5 (not shown). Additional contents, e.g. advertising material, may be included between the members 14 and 36. The **opening** in the collar 26 may be non- circular, and the collar may itself be of plastics material, Fig. 7 (not shown). Instead of being seamed to the can wall as shown, the collar may be supported on an inward bead. The can base may be shaped so as to fit on the top of a similar can stacked below, Fig. 4.



174) Family number: 21450254 (US3341108A)

Title: EASY **OPENING** **BAG**

Priority: US19640338931 19640120

Family:

Publication number	Publication date	Application number	Application date
AU5159664 A1	19660512	AU19640051596	19641111
DE1486576 A1	19690410	DE19641486576	19641202
DK114245 B	19690609	DK19640006082	19641210
ES306402 A1	19650716	ES19640306402	19641125
FR1416823 A	19651105	FR19640997699	19641207
GB1037890 A	19660803	GB19640046210	19641112
NL6414220 A	19650721	NL19640014220	19641207
SE307535 B	19690107	SE19640014872	19641209
US3341108 A	19670912	US19640338931	19640120

Probable Assignee: QUAKER OATS CO

Assignee(s):(std)**:** QUAKER OATS CO ; THE QUAKER OATS CO

Assignee(s): THE QUAKER OATS COMPANY ; QUAKER OATS COMPANY

Inventor(s):(std)**:** KIRK DOUGLAS

Inventor(s): DOUGLAS KIRK ; KIRK D

International class (IPC 8-9): B65B61/18 B65D33/00 B65D75/58 B65D75/66 B65D77/34 (Advanced/Invention);
B65D75/30 (Advanced/Non-invention);
B65D75/52 (Core/Invention);
B65D75/28 (Core/Non-invention)

International class (IPC 1-7): B65D33/00 B65D33/16

CPC: B65D75/30 B65D75/5805 B65D75/5816

European class: B65D75/58B B65D75/58D L65D75/30

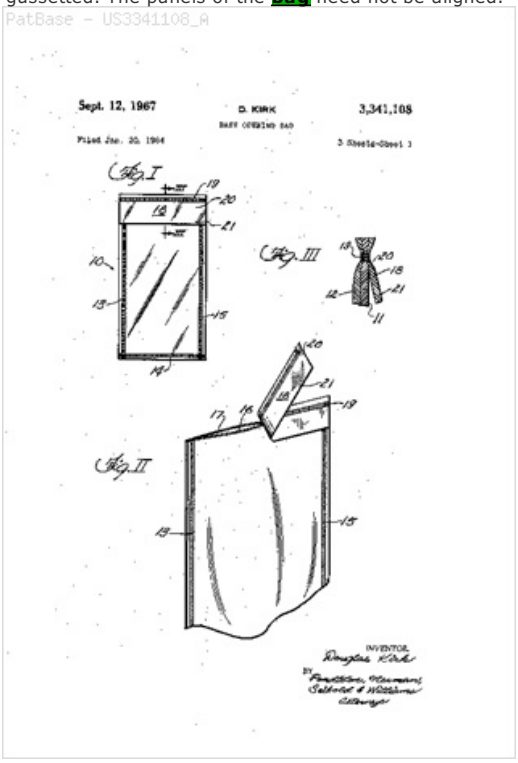
US class: 206/484 383/200 383/205

Classification Explorer

Cited documents: US3170619 A, US2643049 A,

Forward Citations: USD645761, US9560835, US8540782, US8529636, US8523955, US8523954, US8518125, US8518124, US8512419, US8506651, US8506650, US8398723, US8394152, US8388698, US8388697, US8343238, US5893460, US3759439, US3534901, US2010086239, FR2780956,

Abstract:
Source: GB1037890A 1,037,890. **Bags** with tear strips. QUAKER OATS CO. Nov. 12, 1964 [Jan. 20, 1963], No. 46210/64. Heading B8K. A tear strip 18 (Fig. 2) is heat scaled at 19 to the side walls of a **bag** to form a 3-ply **closure**, with a portion 21 left unsealed to form a grip **tab**. The tear strip 18 may be rectilinear extending wholly or partly across the top of the **bag** mouth or in the case of a two compartmented **bag** (Fig. 8, not shown) it may be positioned centrally so that each compartment may be **opened** independently. In another embodiment (Fig. 6, not shown) the tear strip extends diagonally across the edge of the **bag**. An arcuate tear strip 28 (Fig. 5, not shown) may be used. A projecting point may be positioned centrally in the weld so that the tear starts at the point and proceeds away from it in both directions. The top edges of the **bag**, which is preferably made of polyethylene, polypropylene, polyvinyl chloride or cellulosic films, may be gussetted. The panels of the **bag** need not be aligned.



175) Family number: 22991901 (US3303761A)

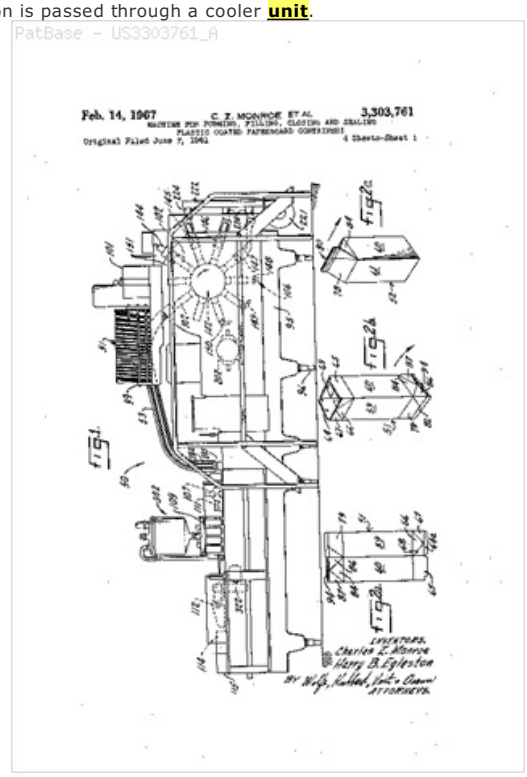
Title:	MACHINE FOR FORMING, FILLING, CLOSING AND **SEALING** PLASTIC COATED PAPERBOARD **CONTAINERS**
Priority:	US19610115367 19610607 US19650462773 19650407

Family:

Publication number	Publication date	Application number	Application date
GB1000155 A	19650804	GB19620021607	19620605
US3239995 A	19660315	US19610115367	19610607
US3303761 A	19670214	US19650462773	19650407

Probable Assignee:	EX CELL O CORP
Assignee(s):(std):	EX CELL O CORP
Inventor(s):(std):	MONROE CHARLES Z ; EGLESTON HARRY B
International class (IPC 8-9):	B29C65/10 B29C65/78 B31B3/28 B65B3/02 B65B51/20 (Advanced/Invention); B29C65/10 B29C65/78 B31B3/00 B65B3/00 B65B51/20 (Core/Invention)
International class (IPC 1-7):	B31B3/26 B65B3/02 B65B51/20
CPC:	B29C65/103 B29C65/10 B29C65/7882 B29C66/80 B29L2031/7166 B65B51/20 B29C66/0342 B29C66/1122 B29C66/43122 B29C66/4326 B29C66/72328 B29C66/73921 B29C66/8322 B29C66/49 B29C66/4322 B29C66/71 B29C66/8161 B65B3/025 B31B50/28
European class:	B29C65/10 B29C65/78M6B B29C66/80 B31B1/28 B31B3/00 B65B3/02C B65B51/20 L29L31/7166 L31B201/26A
US class:	493/134 493/164 493/183 493/184 53/370.9 53/371.8 53/372.3
Classification Explorer	
Cited documents:	US3064542 A, US3028798 A, US3002328 A, US2993419 A, US2903833 A, US2869626 A, US2841942 A, US2831651 A, US2823729 A, US2697313 A, US2357535 A, US2212472 A,
Forward Citations:	WO16146342, US5762595, US5605030, US5337538, US5152736, US5120292, US5083702, US4990128, US4872562, US4869373, US4869372, US4861328, US4838847, US4813548, US4813547, US4792048, US4762234, US4756426, US4712727, US4448008, US4135439, US4072089, US3956975, US3748816, US3648573, US3525194, US3469508, US3432986, US3408906, US3405505, US3392458, US3314216, US2013130877, JP51014950, GB2254285, FR2522615, FR2401832, EP0537962, EP0249264, EP0249264, DE10358750, DE10358750, DE102015104102,

Abstract:
Source: GB1000155A 1,000,155. Making, filling and heat **sealing** gable-top cartons; endless conveyers. EXCELL-O CORPORATION. June 5, 1962 [June 7, 1961], No. 21607/62. Headings B8A, B8C and B8P. [Also in Divisions B5 and F4] Heating **containers** before **sealing**.-Hot air is directed towards selected panels only of the top **closures** of a gable-top carton. In the form shown (Fig. 12), perforated channels in five plates 310 direct hot air from a tiltable gas heater away from the spout forming lip 94 (Fig. 2) and towards the areas of the carton panels which are to be heat **sealed** (see Division F4). Erecting, forming and **sealing** bottom **closures** of cartons: pneumatic conveyers.-Thermoplastic coated blanks 51 (Fig. 2) are withdrawn from a magazine 99 (Fig. 1) erected to **open** ended tubular form at 101 and loaded on to mandrels 102. A mandrel assembly 142 (Fig. 3) carrying the radially disposed mandrels 102 carries the **open**-ended carton blank 51 past a station 144 which pre-bends the bottom **closure** parts, and past air heaters 145, 146, 147 which activate the thermoplastic, to a station 148 where the base portions are folded inwards by plates 238, 239 of a reciprocable shoe 235, the folding being completed by a fixed guide 241. The blank is then taken to stations 149, 150 where pressure pads 251 **seal** the bottom **closures**. The carton is ejected by air pressure jets at the ends of the mandrels via a trackway 280 to a conveyer 108 (Fig. 8), being first sterilized if required. Pre-creasing top **closures**, endless conveyers.- Plates 290, 292, 293 (Figs. 7, 8) on the conveyer 108 hold the carton whilst a pair of opposed triangular folding fingers 295, 296 press the panels 84 against a mandrel 294 in the carton and inclined plates ensure that the rib panels 80 are pre-bent. Folding and **sealing** top **closure**.-After heating, the gable top **closure** panels are folded in by guides 336, 348 (Fig. 14) and **sealed** at 114 by a jaw 34 which is moved against a fixed jaw 346 by a lever (Fig. 15) operated by a cam. The jaws may be coated with a layer of tetrafluoroethylene to prevent them adhering to the thermoplastic coating. To ensure that the carton is tightly **sealed**, this operation is repeated at 115. Cooling means.-A coolant fluid system is incorporated in the shoe 235, the pressure pads 251, the mandrels 102 and in the **sealing** jaws 346, 348 to prevent them adhering to the thermoplastic coating of the carton. After **sealing** the top rib of the carton is passed through a cooler **unit**.



176) Family number: 25241694 (US3268152A)

Title: SELF-**SEALING** VALVE **BAG**

Priority: US19640414072 19641127

Family:

Publication number	Publication date	Application number	Application date
AT269733 B	19690325	AT19650000338	19650115
BE669397 A	19660309		19650909
CH437997 A	19670615	CH19650002726	19650226
DK108446 C	19671211	DK19650001445	19650320
ES308584 A1	19650816	ES19650308584	19650126
GB1093212 A	19671129	GB19650001424	19650112
NL6501638 A	19660531	NL19650001638	19650210
US3268152 A	19660823	US19640414072	19641127

Probable Assignee: THERMOPLASTIC IND INC

Assignee(s):(std)**:** THERMOPLASTIC IND INC

Inventor(s):(std)**:** SWARTZ HENRY D ; HENRY D SWARTZ

Inventor(s): D SWARTZ HENRY

International class (IPC 8-9): B65D30/24 (Advanced/Invention); B65D30/24 (Core/Invention)

International class (IPC 1-7): B29C19/02 B29C24/00 B65D31/10 B65D31/14

CPC: B65D31/147

European class: B65D31/14C

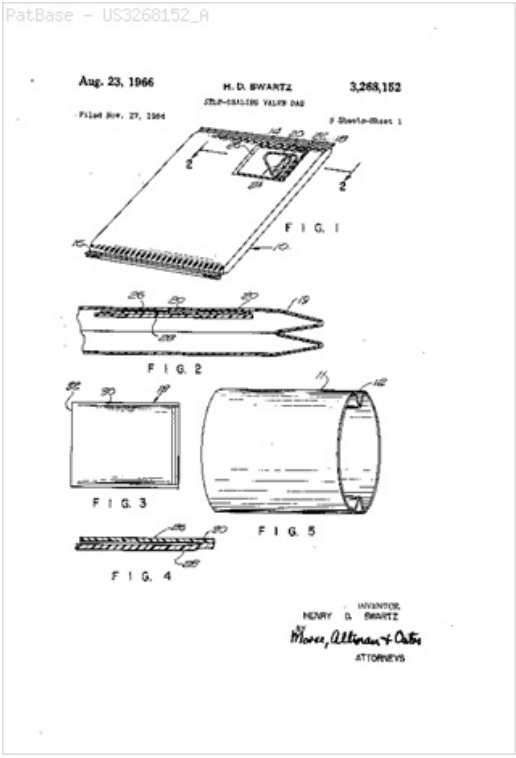
US class: 383/107 383/45 383/58

Classification Explorer

Cited documents: US3180558 A, US3116002 A, US3089636 A, US2593328 A,

Forward Citations: WO9622926, US9751661, US6149304, US5018646, US4715494, US3322327, US3313472, US2009120931, SG80533, AU690195, AU577675,

Abstract:
Source: GB1093212A 1,093,212. Valved **bags**; filling **bags**. THERMOPLASTIC INDUSTRIES Inc. Jan. 12, 1965 [Nov. 27, 1964], No. 1424/65. Heading B8C, B8K. A valve sleeve 18, Figs. 1 and 2, comprising two panels of plastics material having different temperature setting characteristics **sealed** together at 30 is bonded at 20 to the inner face of the **bag** wall so that a slit 22 in the **bag** wall is in register with a corresponding slit in one panel of the valve sleeve. The **bag** 10 may be formed from gussetted multi-flly thermoplastic tubing with perforations in the plies to permit entrained air to escape from the **bag**, the perforations in one ply being offset from those in another ply. The valve **opening** may be **sealed** by a pressure sensitive adhesive flap 82 Fig. 9, provided with a protective **covering** 84. The **covering** 84 may be stripped by a **tab** 86. A gussetted valve sleeve 48, Fig. 10, **sealed** to the **bag** wall at 54, 56 may be inserted in a rigid **container** having an **opening** corresponding to the **opening** 58 in the **bag**. The **bags** may be connected end-to-end by perforated tear lines 90 (Fig. 15) and wrapped into a roll. Several **bags** may be filled simultaneously by nozzles 96 in a filling **unit** 94.



177) Family number: 22792068 (US3202271A)

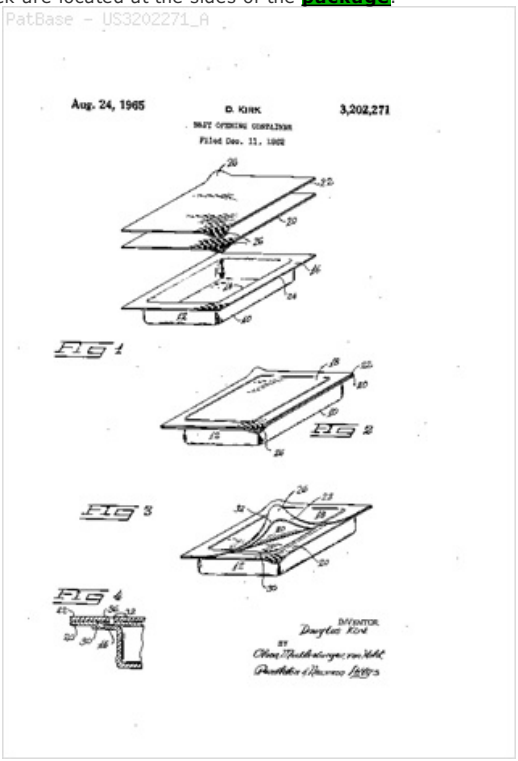
Title:	EASY **OPENING** **CONTAINER**
Priority:	US19620243778 19621211

Family:

Publication number	Publication date	Application number	Application date
DK105146 C	19660822	DK19630005559	19631127
GB1005141 A	19650922	GB19630046365	19631125
NL301556 A	00000000		00000000
US3202271 A	19650824	US19620243778	19621211

Probable Assignee:	QUAKER OATS CO
Assignee(s):(std):	QUAKER OATS CO
Assignee(s):	THE QUAKER OATS COMPANY
Inventor(s):(std):	DOUGLAS KIRK
Inventor(s):	KIRK DOUGLAS
International class (IPC 8-9):	B65D77/20 (Advanced/Invention); B65D77/10 (Core/Invention)
International class (IPC 1-7):	B65D17/16 B65D77/00 B65D85/72
CPC:	B65D77/2032 B65D2577/205 B65D2577/2083 B65D2577/2091
European class:	B65D77/20E1B L65D577/20M1 L65D577/20P1 L65D577/20P2
US class:	206/525 229/123.1 229/123.2 D9/438
Classification Explorer	
Cited documents:	US3101870 A, US3079057 A, US3069273 A, US3021001 A, US2973087 A, US2946478 A, US2940230 A, US2875563 A, US2870935 A, US2554160 A,
Forward Citations:	US5865335, US5692635, US4351473, US4022324, US3713849, US3682366, US3679093, US3514029, US3483964, US3454210, US3438483, US3335939, US2012318801, US2008017655, GB2123786, ES2259869, EP0088730,

Abstract:
Source: GB1005141A 1,005,141. **Opening** **containers**; **packages**. QUAKER OATS CO. Nov. 25, 1963 [Dec. 11, 1962], No. 46365/63. Headings B8C and B8D. A vapour- and moisture-proof **package**, particularly intended for foodstuffs, comprises a body portion 10 of thermoplastics and a lid formed of two superposed sheets 20, 22, wherein sheet 20 is joined to the body portion along a peripheral **seal** line 30, Fig. 4, and sheet 22 is joined to sheet 20 along a **seal** line 32 parallel to and spaced from **seal** line 30 in order to provide a tear track 36 between the **seals**. Suitable materials for body portion 10 include polyethylene, polypropylene and vinyl chloride acetate and preferably the sheets 20, 22 are also of thermoplastic material, the **seals** being formed by the application of heat and pressure, e.g. by using heat bars or rollers. One of the sheets 20, 22 may have a cut-out centre portion and one or more pull-**tabs** 26 which overlap the outer edge 24 of the body 10 may be provided. Alternatively, the sheets may overhang the body portion so that the **seal** lines and tear track are located at the sides of the **package**.



178) Family number: 22956781 (US3205889A)

Title:	PARENTERAL FLUID **CONTAINER** AND PORT STRUCTURE
Priority:	US19620211568 19620723

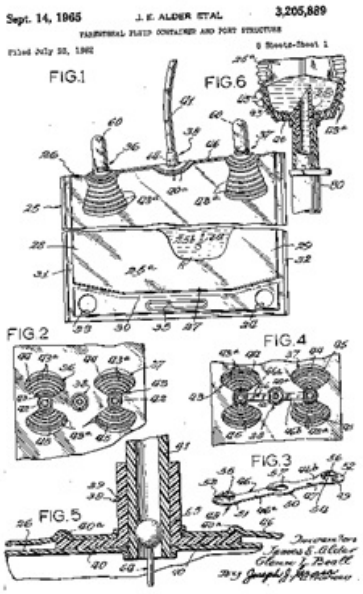
Family:

Publication number	Publication date	Application number	Application date
GB1027288 A	19660427	GB19630007738	19630226
US3205889 A	19650914	US19620211568	19620723

Probable Assignee:	ABBOTT LABORATORIES
Assignee(s):(std):	ABBOTT LAB
Assignee(s):	ABBOTT LABORATORIES
Inventor(s):(std):	ALDER JAMES E ; BEALL GLENN L
International class (IPC 8-9):	A61J1/00 A61J1/05 (Advanced/Invention); A61J1/00 A61J1/05 (Core/Invention)
CPC:	A61J1/10 B29C45/0081
European class:	A61J1/00T A61J1/10 L29C45/00K
US class:	222/107 222/541.6 383/96 604/110 604/262 604/408
Classification Explorer	
Cited documents:	US3110411 A, US3105613 A, US3073307 A, US3057129 A, US3030955 A, US3022613 A, US3006341 A, US2999387 A, US2969102 A, US2940444 A, US2894510 A, US2838046 A, US2777490 A, US2323629 A, US2124565 A,
Forward Citations:	WO9306948, WO8501472, US8136330, US8034042, US8034041, US7717897, US7530974, US7527619, US7488311, US5845812, US5827164, US5743435, US5580349, US5452823, US5372281, US5339988, US4794750, US4722727, US4706830, US4698061, US4589879, US4520948, US4415393, US4410026, US4386622, US4368765, US4340049, US4305443, US4300560, US4274554, US4240481, US4196088, US3963026, US3951148, US3921634, US3777697, US3642047, US3583460, US3554256, US3509879, US3465784, US3364930, US3306327, US2009235619, US2009209934, US2009192484, US2007027437, US2006282061, US2006138070, US2006138069, FR2450613, FR2419731, EP2628474, EP0927552, EP0315740, EP0277803, EP0269419, EP0156828,

Abstract:
Source: US3205889A 1,027,288. Making **bags** with nozzles. ABBOTT LABORATORIES. Feb. 26, 1963 [July 23, 1962], No. 7738/63. Heading B5D. [Also in Division A5] A continuous method of making **bags**, particularly for the collection, **storage** and administration of parenteral liquids, comprises the steps of securing port assemblies at spaced intervals along the medial portion of a flexible web, folding the web along the medial portion and **sealing** the folded web portions together to form **sealed** chambers, each having one or more port assemblies along a transverse edge. Part assemblies 36, 37, disposed along the folded edge of the **bag** for the connection through a piercing needle 80 to a fluid administration set 81, 82, 83, 84 or a tube interconnecting two **bags**, each comprise a tube 42 (Fig. 7, not shown) and a flange 43, having a pair of ribbed enlarged portions 44, 45, which is **sealed** to the **bag** so that the enlarged portions extend along opposite sides of the **bag** to hold them spaced apart and form finger shields. The portion of the **bag** wall extending across the tube 42 forms a pierceable diaphragm 25c (Fig. 7, not shown), which is restrained against outward flexure by an inwardly projecting member 61a of a **closure** cap 61. The cap has a flange 62 which is held against the port flange 53 by an apertured flange 51 of a hanger strip 46 (Fig. 4, not shown). The hanger strip extends between the port assemblies, the flanges 51 being **sealed** around their peripheries to the port flanges 43. The **closure** is removed by forcing its flange from beneath the hanger flange. Alternatively, the **closure** flange is **sealed** to the port flange and the cap is removed by rupturing a line of weakness between the **closure** cap and the flange. A port assembly 38 (Fig. 5, not shown) comprises a tube 39 having a ribbed flange 40 which is **sealed** to the **bag**. The tube 39 receives one end of a tube 41 which is used in filling the **bag** and may have a piercing needle at the other end for connection to another **bag**. The end of the tube in the **bag** has a **closure** member 64 in the form of a ball or plug manipulable through the **bag** wall. The folded edge 26 of the **bag** may be disposed at an angle other than a right angle to the two adjacent **sealed** side edges 28, 29. The **bag** may be suspended with the port assemblies at the bottom by one or more hanger holes 33, 34, 35 which may be disposed at different levels so that the **bag** may be tilted as desired. The hanger portions 46a, 46b of the hanger strip 46 may be of different lengths (Fig. 19, not shown), so that when they are each placed over a hook the **bag** is tilted. Alternatively, hanger **tabs** (Fig. 20, not shown) may be connected to the **bag** between the port assemblies or holes may be formed in the **sealed** edges adjacent the folded edge (Fig. 21, not shown). The **bags** are made continuously from a flexible web 151 (Fig. 22) on a roll 150. The web is washed in a tank 155 and after being squeezed between rollers 157, 158 passes to a station 159 where the port assemblies including hangers are dielectrically **sealed** along its medial portion. The web is then passed to a heated drying station 162. After folding the web along its medial portion at a station 164, opposed portions of the web are **sealed** to one another transversely of the web and along its free edges to form individual interconnected **bags** at a **sealing** station 168 (Fig. 22b). The **bags** are then partially severed from one another at a station 177 and filled with anticoagulant at a station 179, the **closures** 64 and tubes 41 being subsequently applied. Alternatively, the partially connected **bags** are wound on a roll 184 for **storage**. The **bags** and port assemblies may be made of polyvinyl chloride and the **closures** for the port assemblies may be made of polypropylene, nylon, vinyl plastics, polycarbonate or polyethylene.

PatBase → US3205889_A



179) Family number: 22801201 (US3289386A)

© PatBase

Title: METHOD OF MAKING **LABELED** **PACKAGE**

Priority: US19630262045 19630301 US19640403685 19640923

Family:

Publication number	Publication date	Application number	Application date
US3207300 A	19650921	US19630262045	19630301
US3289386 A	19661206	US19640403685	19640923

Probable Assignee: REYNOLDS METALS CO

Assignee(s):(std)**:** REYNOLDS METALS CO

Assignee(s): REYNOLDS METALS COMPANY ; REYNOLDS METAL CO ; REYNOLDS METAL COMPANY

Inventor(s):(std)**:** FARMER HAROLD L

International class (IPC 8-9): B65B61/20 B65B9/02 B65B9/20 B65B9/213 B65C5/02 B65D71/00 B65D71/10 B65D75/54 (Advanced/Invention);
B65B61/20 B65B9/00 B65B9/10 B65C5/00 B65D71/00 B65D71/06 B65D75/52 (Core/Invention)

International class (IPC 1-7): B65C3/00

CPC: B65B9/02 B65B9/213 B65B41/16 B65B61/202 B65C5/02 B65D71/10 B65D75/54

European class: B65B41/16 B65B61/20B B65B9/02 B65B9/213 B65C5/02 B65D71/00C5D B65D71/00CA5D B65D71/06F2 B65D71/10 B65D75/54

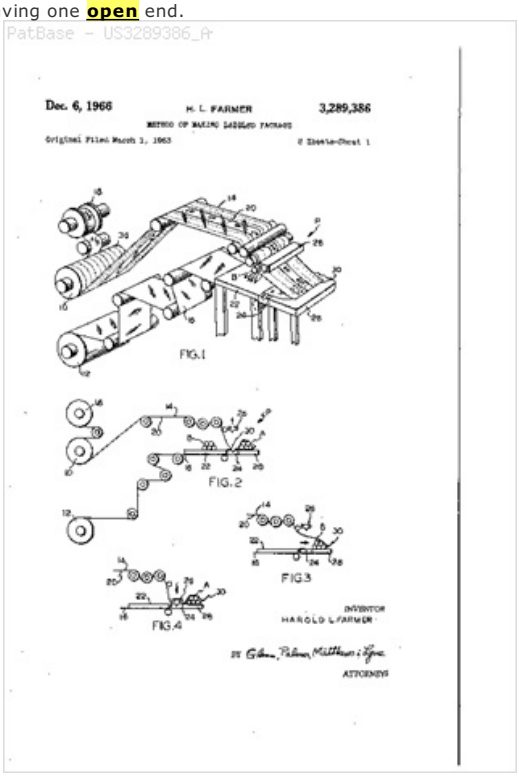
US class: 156/DIG.2 206/459.5 206/497 383/106 383/127 53/415 53/450 53/466 53/479

Classification Explorer

Cited documents: US3172246 A, US3085375 A, US3060655 A, US3022543 A, US2980245 A, US2878628 A, US2878174 A, US2877500 A, US2815620 A, US2698046 A, US2679968 A, US2545243 A, US2260064 A, US2256156 A, US2255810 A, US2082114 A,

Forward Citations: WO14043342, USD451795, US9663686, US9481484, US9434513, US9346612, US9120608, US9033578, US9016555, US8567660, US8367599, US8182152, US8075188, US8033081, US7674761, US7356979, US7246476, US6234673, US6041575, US5369936, US5171593, US5155973, US4651499, US4563859, US4548024, US4458470, US4423584, US4239824, US4154637, US3650773, US3392823, US2016068382, US2014270590, US2013067864, US2011107725, US2010120650, US2008216939, US2008147489, US2006045941, US2006045393, US2004103621, US2003139318, US2003040753, FR2498560,

Abstract:
Source: US3289386A (Claim 1) 1. In a m-tbod of **packaging**, the steps of advancing spaced superposed webs of transparent thermoplastic **packaging** material, simultaneously advancing a spaced parallel pair of narrow webs of printed thermoplastic **packaging** material between said superposed webs and in intimate contact with one of said superposed webs to cause snug adherence therebetween, placing two charges of contents in spaced transverse relation between said superposed webs, longitudinally severing said superposed webs between said arti(;Ie charges and between said printed films, transv.-rsely severing said superposed webs forwardly and rearwardly of said charges, and heat **sealing** said webs along the longitudinal and transverse lines of severence to form two cup-like **labeled** **packages** having one **open** end.



180) Family number: 22801653 (US3207527A)

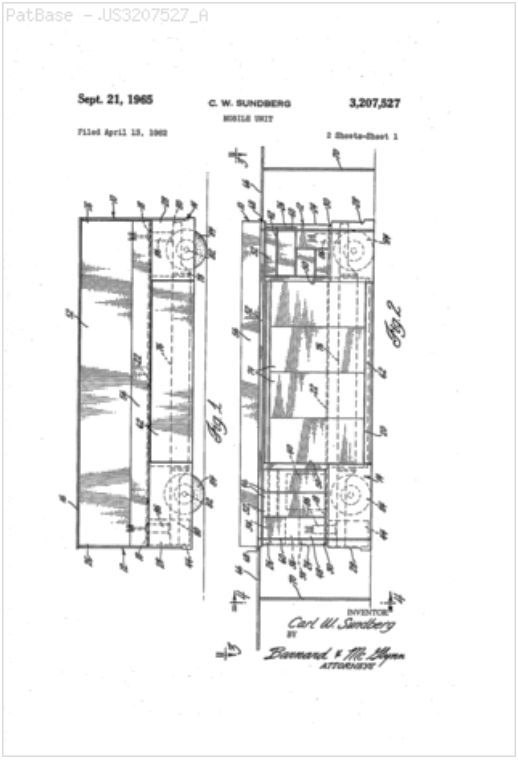
Title:	MOBILE **UNIT**
Priority:	US19620187365 19620413

Family:

Publication number	Publication date	Application number	Application date
US3207527 A	19650921	US19620187365	19620413

Probable Assignee:	AMERICAN METAL PROD
Assignee(s):(std):	AMERICAN METAL PROD
Assignee(s):	AMERICAN METAL PRODUCTS CO ; AMERICAN METAL PRODUCTS COMPANY
Inventor(s):(std):	SUNDBERG CARL W
International class (IPC 8-9):	B62D33/08 (Advanced/Invention); B62D33/00 (Core/Invention)
International class (IPC 1-7):	B60P3/02
CPC:	B62D33/08
European class:	B62D33/08
US class:	280/656 296/22 52/143 52/69
Classification Explorer	
Cited documents:	US540866 A, US3012795 A, US3001796 A, US2940769 A, US2904850 A, US2890498 A, US2860384 A, US2835502 A, US2551207 A, US245937 A, US1953053 A, US1937062 A,
Forward Citations:	WO03106249, US7360784, US5664799, US4842316, US2008162180, US2006017258, US2005275234, US2005179235, US2005082772, GB2521763,

Abstract:
Source: US3207527A (Claim 1) 1. A mobile vehicular **unit** comprising a body member including oppositely spaced roof and floor means, side wall means interconnecting said roof and floor means on one side of said body member to form an access **opening** to the interior thereof between said roof and floor means, a combined roof and **closure** member having one end thereof hingedly connected to said body member adjacent said roof means, said combined roof and **closure** member being movable between a lowered **closure** position relative to said access **opening** and a raised roof-forming position extending outwardly from said body member, and a combined access and **closure** member having one end thereof hingedly connected to said body member adjacent said floor means, said combined access and **closure** member being movable between a raised **closure** position relative to said access **opening** and a lowered ground-engaging position extending outwardly from said body member for ambulatory access to said access **opening**, the other end of said roof and **closure** member and said access and **closure** member being in mating engagement in said **closure** positions thereof.



181) Family number: 23557137 (US3373918A)

© PatBase

Title: Moisture proof **package**

Priority: DE1965D031896U 19650902 FR19660074810 19660831

Family:

Publication number	Publication date	Application number	Application date
BE686375 A	19670215		19660902
DE1925763 U	19651021	DE1965D031896U	19650902
FR1491024 A	19670804	FR19660074810	19660831
GB1107476 A	19680327	GB19660039443	19660902
LU51852 A	19661031	LU19660051852	19660830
NL6612362 A	19670303	NL19660012362	19660901
US3373918 A	19680319	US19660571223	19660809

Probable Assignee: DYNAMIT NOBEL AG

Assignee(s):(std)**:** DYNAMIT NOBEL AG

Assignee(s): DYNAMIT NOBEL AKTIENGESELLSCHAFT

Inventor(s):(std)**:** KRINGS ADAM ; ADAM KRINGS

International class (IPC 8-9): B65D77/06 B65D81/18 B65D81/20 F42B39/00 (Advanced/Invention); B65D77/06 B65D81/18 B65D81/20 F42B39/00 (Core/Invention)

International class (IPC 1-7): B65D31/08 B65D8/00 F42B39/00

CPC: B65D77/062 B65D81/18 B65D81/2023 F42B39/00

European class: B65D77/06B B65D81/18 B65D81/20B2 F42B39/00

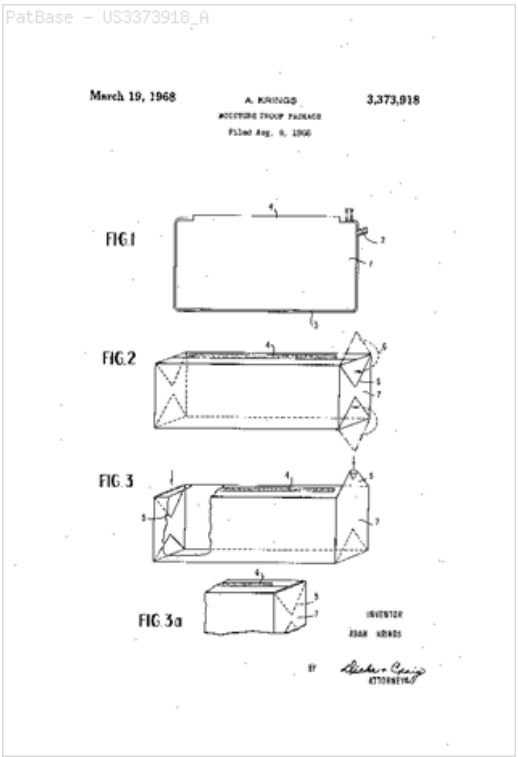
US class: 206/3 217/3R 229/14 383/100 383/103 383/50 383/55

Classification Explorer

Cited documents: US3242630 A, US3233815 A, US3112047 A, US2672268 A,

Forward Citations: USRE28892, US5561915, US4235366, US3521806, FR2411768,

Abstract:
Source: US3373918A ABSTRACT OF THE DISCLOSURE
The present disclosure relates to **packages**. More particularly,



182) Family number: 22862675 (US3214009A)

Title:	CIGAR **PACKAGING** OR THE LIKE
Priority:	US19640358225 19640408

Family:

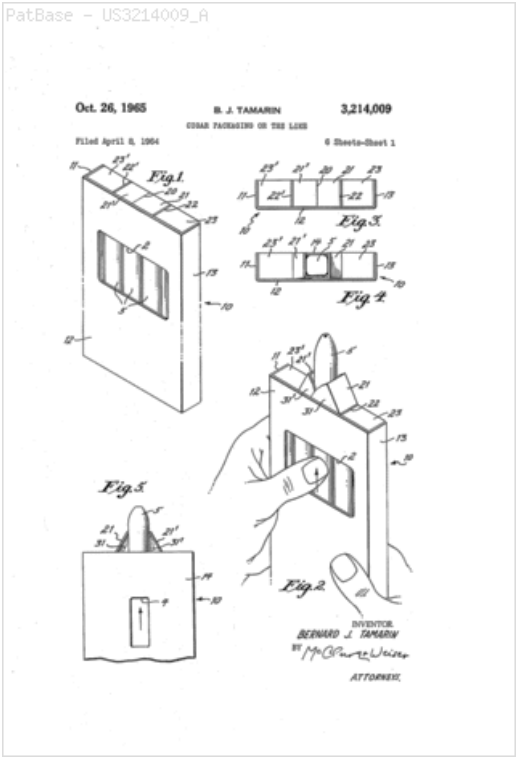
Publication number	Publication date	Application number	Application date
US3214009 A	19651026	US19640358225	19640408

Probable Assignee:	PULL PACKAGING INC
Assignee(s):(std):	PULL PACKAGING INC
Inventor(s):(std):	TAMARIN BERNARD J
International class (IPC 8-9):	B65D5/72 B65D85/12 (Advanced/Invention); B65D5/72 B65D85/08 (Core/Invention)
International class (IPC 1-7):	B65D85/10 B65D85/20
CPC:	Y10S206/815 B65D5/721 B65D85/12
European class:	B65D5/72B B65D85/12
US class:	206/250 206/268 206/273 206/815 221/250 229/131.1

Classification Explorer

Cited documents:	US580080 A, US3057533 A, US2202280 A, US1995556 A, US1443279 A, US1220496 A, IT495553 A,
Forward Citations:	USD792784, USD734170, USD734169, US8448784, US8245841, US7967018, US5183202, US4372443, US3599830, US2011100846, US2009114234, US2009008277, US2008173564,

Abstract:
Source: US3214009A (Claim 1) 1. In a portable **package** for cylindrical articles arTanged side by side in a row, a **container** formed from a unitary folding blank and having an end **closure** comprising a pair of adjacent **closure** portions hinged foldably along spaced parallel lines flanking them and crossing from side to side with Tespect to the row, the portions being swingably **openable** together along and between the hinge Enes by forcible contact of the end of one of the articles against the **closure** from the inside to **dispense** that article.



183) Family number: 23049870 (US3221873A)

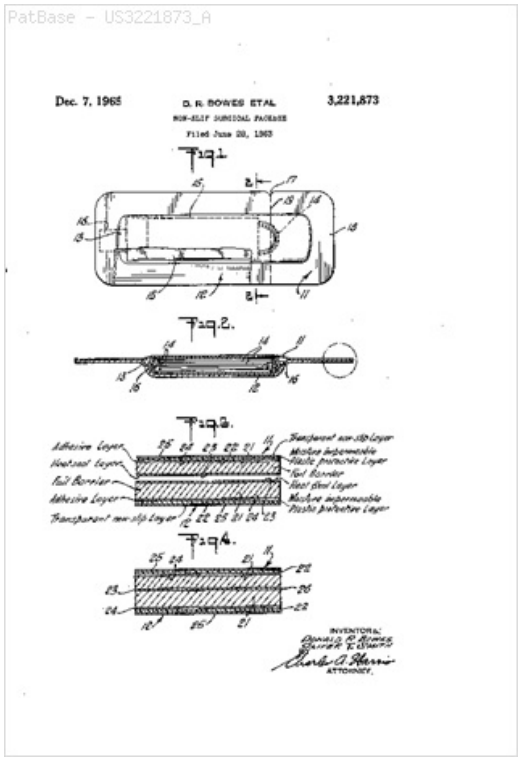
Title:	NON-SLIP SURGICAL **PACKAGE**
Priority:	US19630291339 19630628

Family:

Publication number	Publication date	Application number	Application date
AU4590764 A1	19651223	AU19640045907	19640618
DE1298236 B	19690626	DE1964B077406	19640625
GB1062696 A	19670322	GB19640026520	19640626
US3221873 A	19651207	US19630291339	19630628

Probable Assignee:	ETHICON INC
Assignee(s):(std):	BOWES DONALD R ; DONALD ROBERT BOWES ; ETHICON INC ; OLIVER THOMAS SMITH ; SMITH OLIVER T
Assignee(s):	DONALD ROBERT BOWES AND OLIVER THOMAS SMITH
Inventor(s):(std):	THOMAS SMITH OLIVER ; SMITH OLIVER T ; ROBERT BOWES DONALD ; BOWES DONALD R
Inventor(s):	DONALD ROBERT BOWES AND OLIVER THOMAS SMITH
International class (IPC 8-9):	A61B17/04 A61B17/06 A61F15/00 (Advanced/Invention); A61B17/06 A61F15/00 (Core/Invention)
International class (IPC 1-7):	A61L17/02 A61L5/00 B65D85/56
CPC:	A61B17/06133 A61F15/001
European class:	A61B17/06P4 A61F15/00B
US class:	206/388 206/63.3 383/209
Classification Explorer	
Cited documents:	US2993589 A, US2872094 A, FR1244570 A, FR1232033 A, DE1863980 U,
Forward Citations:	USD709774, USD699594, US9889963, US9296152, US9126388, US9125532, US5468252, US5439102, US5366081, US5359831, US5341922, US5222978, US5220769, US5217772, US5178277, US5129511, US4557381, US4168000, US4048205, US4014433, US3613879, US3343663, US2015144649, US2011233097, FR2621475, EP2493755, EP0578101, EP0498093, EP0311528, DE2321608,

Abstract:
Source: GB1062696A 1,062,696. Laminates. R. R. BOWES, and O. T. SMITH. June 26, 1964 [June 28, 1963], No. 26520/64. Heading B5N. [Also in Division B8] A pair of laminates, each consisting of an inner layer 21 of aluminium foil joined by a polyester adhesive to an outer layer 22 of transparent polyester film, are heat **sealed** about a sterile surgical product by an alcohol resistant coating 23, e.g. of P.V.C./P.V.- acetal copolymer. An outer transparent layer 25 of polyester adhesive containing small silica particles is applied to give the **package** a high wet coefficient of friction. Preferably the layer 22 is of polyethylene terephthalate which protects the foil layer from moisture induced electrolytic corrosion, heavy metals attack and mechanical damage.



184) Family number: 22925464 (US3223233A)

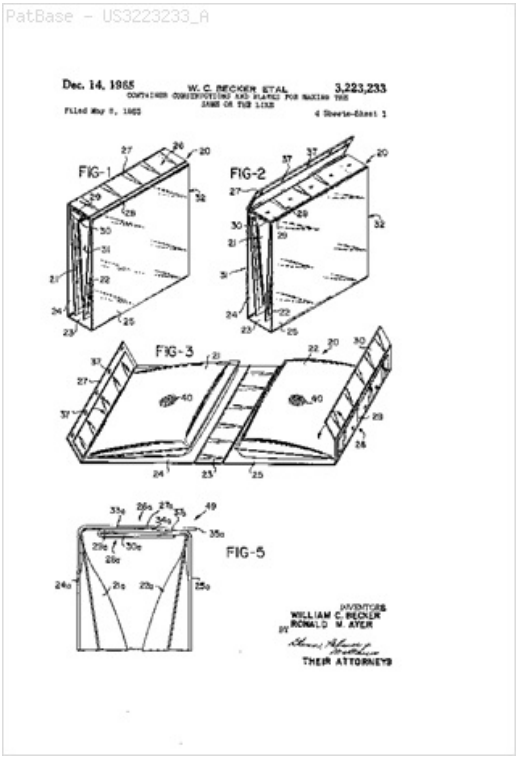
Title:	**CONTAINER** CONSTRUCTIONS AND BLANKS FOR MAKING THE SAME OR THE LIKE
Priority:	US19630278827 19630508

Family:

Publication number	Publication date	Application number	Application date
GB1060866 A	19670308	GB19640015865	19640416
US3223233 A	19651214	US19630278827	19630508

Probable Assignee:	REYNOLDS METALS CO
Assignee(s):(std):	REYNOLDS METALS CO
Assignee(s):	REYNOLDS METALS COMPANY
Inventor(s):(std):	AYER RONALD M ; BECKER WILLIAM C
International class (IPC 8-9):	B65D75/26 B65D75/38 B65D77/06 (Advanced/Invention); B65D75/26 B65D75/38 B65D77/06 (Core/Invention)
International class (IPC 1-7):	B65D71/00 B65D83/06
CPC:	B65D75/26 B65D75/38 B65D77/062
European class:	B65D75/26 B65D75/38 B65D77/06B
US class:	206/466 229/117.33 229/245 383/104 383/119 383/37
Classification Explorer	
Cited documents:	US683789 A, US3088624 A, US2990997 A, US2908121 A, US2850160 A, US2735544 A, US2664239 A, US2589735 A, US2416816 A, US2284283 A, US2225810 A, US2191472 A, US2125318 A, US1913134 A, US1774026 A, GB537852 A,
Forward Citations:	WO03097473, USD607157, US8049426, US7594958, US7532451, US7410532, US6471053, US5482179, US4693412, US4671451, US4089416, US3647058, US3603453, US3392901, US3389825, US3380644, US3347363, US3326364, US3315801, US2017088392, US2016194129, US2007278131, US2007028852, US2006029298, US2003002755, DE2351189,

Abstract:
Source: GB1060866A 1,060,866. Making flat **bags**. REYNOLDS METALS CO. April 16, 1964 [May 8, 1963], No. 15865/64. Heading B5D. [Also in Division B8] An **open**-ended rectangular **package** (20), Fig. 1, formed from a blank has pouches (21), (22) the upper ends of which are sandwiched within the **package** top wall and secured by heat-**sealing** or adhesive. Flaps (27), (28) of the **package** top wall are glued together at a series of spots. The blank may be formed of paper laminated between metal foil, the paper being of a type undamaged by cooking temperatures. The adjacent side walls of the pouches may be adhered together (at 40), Fig. 4, and each pouch may be adhered to the inside of the **package** wall (at 39). A band of material (38) may be heat-shrunk on to the **package** in order to make it more rigid. A web of **packaging** material, Fig. 7, has fold or score lines (43-47) defining blanks (41) which run longitudinally or (as in Fig. 8) transversely of the web. In modifications, the outer flap (27a), Fig. 5, is extended to provide a grip for tearing **open** the **package**; the inner fold of the lower flap (28b) may be omitted, Fig. 6; or the pouch may be heat-**sealed** to the **package** wall by means of its own **closure** **seal**, the pouch wall being a laminate of a heat-**sealable** material and metal foil, and the foil being omitted at the **seal**, Fig. 9. A single pouch may be secured in a **package** which is surrounded by a heat-**sealable** band, Fig. 10, or the **open** sides of the **package** may each be secured by a separate band, Fig. 11.



185) Family number: 22647335 (US3244210A)

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Title:	DISPOSABLE PLASTIC **BAG** FOR HOT OR COLD SUBSTANCES
Priority:	US19620248097 19621228

Family:

Publication number	Publication date	Application number	Application date
DE1931862 U	19660127	DE1963SC34881U	19631120
GB1073231 A	19670621	GB19630050989	19631224
US3244210 A	19660405	US19620248097	19621228

Probable Assignee:	SCHOLL MFG CO INC
Assignee(s):(std)**:**	SCHOLL MFG CO INC ; SCHOLL MFG CO LTD ; SCHOLL WILLIAM M DR
Assignee(s):	THE SCHOLL MFG CO ; THE SCHOLL MFG CO INC ; SCHOLL MFGCO LTD ; THE SCHOLL MFG CO LIMITED ; DR WILLIAM M SCHOLL ; SCHOLL MFG CO
Inventor(s):(std)**:**	GIACOMO CLARIZIO ; SCHOLL WILLIAM M DR
Inventor(s):	DR WILLIAM M SCHOLL ; CLARIZIO GIACOMO
International class (IPC 8-9):	A45C5/02 A61F7/08 B29C65/02 B31B41/00 B65D33/22 (Advanced/Invention); A61F7/02 A61F7/10 (Advanced/Non-invention); A45C5/00 A61F7/08 B29C65/02 B31B41/00 B65D33/18 (Core/Invention); A61F7/00 A61F7/02 (Core/Non-invention)
International class (IPC 1-7):	A45C5/02 A61F7/04 B65D31/02 B65D33/22
CPC:	B29C66/431 A61F7/08 A61F7/10 A61F2007/0002 A61F2007/0225 B31B2241/00 B29C65/02 B29C66/1122
European class:	A61F7/04B2 A61F7/08 A61F7/08B B29C65/02 B29C65/02G B31B41/00 K61F7/00A2 K61F7/02G K61F7/10 L31B241/00
US class:	206/554 383/109 383/110 383/35 383/37 383/85 383/9 383/91 607/112

Classification Explorer

Cited documents:	US3104798 A, US3028899 A, US2977729 A, US2865420 A, US2861735 A, US2798522 A, US2667198 A, US2624246 A, US2429505 A, US2273128 A, US1702592 A, US1605141 A, US1603001 A, US1456836 A, CH353612 A, CH278159 A,
Forward Citations:	US9669185, US9492313, US9211212, US9089400, US8425583, US8236038, US5356426, US5074300, US5045041, US4782835, US4488552, US2011125238, US2009054958, US2007250138, EP0323808, EP0263041, EP0263041,

Abstract:
Source: US3244210A 1,073,231. Heating and cooling appliances; hot-water bottles. SCHOLL MFG. CO. Ltd. Dec. 24, 1963 [Dec. 28, 1962], No. 50989/63. Headings A5R and A5X. [Also in Division B8] Multi-ply **bags**. A flattened plastics tube folded asymmetrically longitudinally about a line 14 (Fig. 6) is heat **sealed** along lines 21, 22, 23 to give a **bag** with an **open** neck. The initial tube may be formed by welding a sheet, and the weld (41) (Fig. 17, not shown) may be made at the same time as the transverse welds. Several **bags** are preferably formed simultaneously, as in Fig. 6, to be torn apart at the welds. The welds may be performed by an upper reciprocating die as the material is fed over a flat plate electrode of a high frequency welding press. The same die may be used for several sizes of **bag**. **Tabs** (3) (Fig. 7, not shown) between the **bags** may be provided with holes 25 so that, when the **bag** is to be used for an ice pack, it may be tied to the patient with a string passing through the holes. If the **bag** is to be used as a hot water bottle, a **covering** (36) (Fig. 13, not shown) in imitation chamois or formed from sheet material made of gossamer thin sheets of cellucotton pressed together, may be folded around the folded tube 13 and heat **sealed** to the **bag** during its formation. Closing the mouth. After folding the neck about lines (30, 31, 32) (Fig. 8, not shown) it is rolled over onto a piece of double-sided adhesive tape (28), which may have a removable protecting sheet (29). Alternatively a piece of stiffer material (33) (Fig. 10, not shown) may be attached to the neck at (12) and the neck of the **bag** rolled round this and closed by snap fasteners (34), (35). The fastened strip can then be used as a handle.



186) Family number: 25489222 (US3313085A)

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Title: APPARATUS FOR FILLING COSMETIC ARTICLES

Priority: IT19620024150 19620606 IT19620024354 19620612 IT19620029007 19621114

Family:

Publication number	Publication date	Application number	Application date
AT245172 B	19660210	AT19630004480	19630604
AT249272 B	19660912	AT19630004577	19630606
DE1467712 A1	19690213	DE19631467712	19630531
SE312634 B	19690721	SE19630006246	19630606
US3313085 A	19670411	US19630284894	19630603
US3315344 A	19670425	US19630285459	19630603

Probable Assignee: EJECTORET SA

Assignee(s):(std)**:** EJECTORET S A ; EJECTORET SA ; SEBEC

Assignee(s): SEBEC SA

Inventor(s):(std)**:** GIUSEPPE NICLAS GIULIO ; NICLAS G

Inventor(s): NICLAS GIULIO GIUSEPPE

International class (IPC 8-9): A45D40/06 A45D40/16 A61J3/08 A61K8/02 A61Q1/06 (Advanced/Invention); A45D40/00 A45D40/06 A61J3/00 A61K8/02 A61Q1/02 (Core/Invention); A45D (Subclass/Invention)

International class (IPC 1-7): A45D40/16 A61J A61K7/02 A61K7/027 B01J4/02

CPC: A61J3/08 A61K8/02 A61Q1/06 Y10S206/817 Y10S425/032 Y10S425/201 A45D40/06 A45D40/16 Y10T29/49826 Y10T29/4998

European class: A45D40/06 A45D40/16 A61J3/08 A61K8/02 A61Q1/06

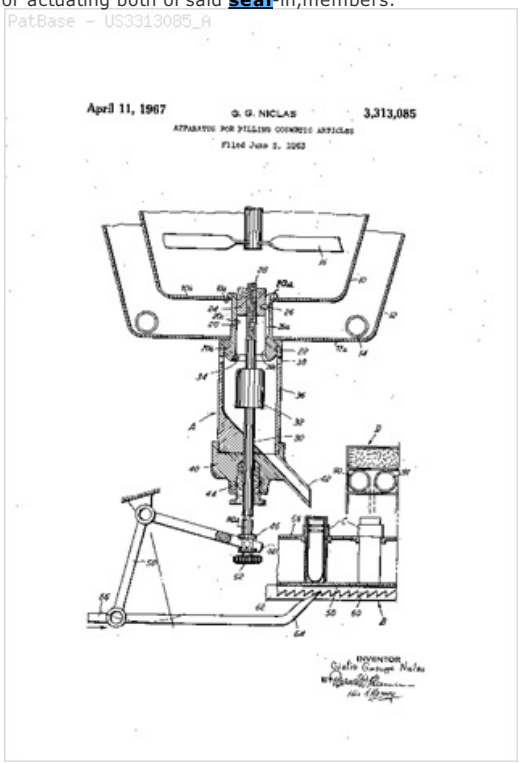
US class: 206/385 206/817 264/267 264/268 29/428 29/527.1 401/49 401/78 425/257 425/261 425/3 425/404 425/454 425/DIG.201 425/DIG.32 53/127

Classification Explorer

Cited documents: US3124913 A, US3101159 A, US2969632 A, US2879548 A, US2855632 A, US2820579 A, US2774989 A, US2732584 A, US2714980 A, US2646912 A, US2263302 A, US2192675 A, US1488130 A, US1164775 A, US1069017 A, US1064150 A,

Forward Citations: WO9902323, WO9830195, WO9612421, WO0195760, WO0025625, WO0025625, US9420870, US6158911, US6033606, US5316712, US4813801, US4543702, US4393643, US4069574, US3493309, US2014130457, FR2810218, FR2704403, FR2639260, EP0735832, EP0243328, DE4445231, DE4445231,

Abstract:
Source: US3313085A (Claim 1) 1. Apparatus for the handling of nio!ds for receiving a molten mass, particularly fGr the production of cosmetic -articles and the like, comprising support ni eans for carryiig the molds to be filled with ',he molten mass, guide means for displaceably - Uiding said support means past individual treating st_tions in a predeterm,.ned path of travel, a dosing device for filling each of the molds with a dosed quantity of molten mass, a co-Iin.- device for solidifying the molten mass contained in the mol_ds, said pouring device and cooling device bei-rig successively arranged along said predetermintd path of tr,,vel for the -inolds, said dosing device including a hollow, **open**-ended dosing cylinder provided with a first **opening** at one end thereof for the infeed of molten mass and a second **opening** at the other end thereof fc)r the outi'eed,of the niolten mass, a respective **sealing** member cooperating with each first and second **opening** mbunted to enter its associatecl **opening** and operating in opposed sealin_ relation whereby when one of the aforeinentioned ope-Qings is closed the other is rendered unobstructed, means for mounting both of said **sealing** members for Telative displacemept to selectively vary the distance between said **sealing** members in order to control the degree of peiietration of the associated **sealing** member into said second openin._ for the outfeed of the molten mass, to thereby control the a,mount of molten mass which can fill said dosin_ cylinder throu.-h selective regulation of its volume and common actuating means for actuating both oi said **seal**-in,members.



187) Family number: 21967035 (DE1211064B)

Title:	VERFAHREN ZUR HERSTELLUNG VON ALLSEITIG GESCHLOSSENEN FALTBEHAELTERN UND ZUSCHNITT
Priority:	DE1955B035023 19550324

Family:

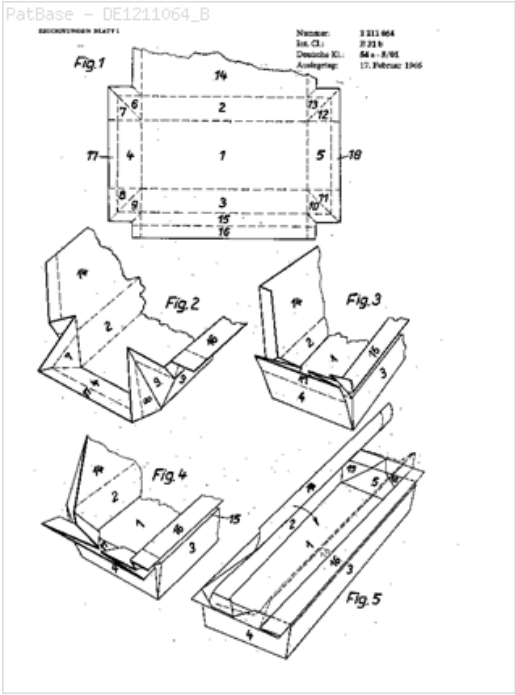
Publication number	Publication date	Application number	Application date
DE1211064 A	00000000		00000000
DE1211064 B	19660217	DE1955B035023	19550324

Probable Assignee:	BAHLSEN WERNER
Assignee(s):(std):	BAHLSEN WERNER
Assignee(s):	WERNER BAHLSEN
Inventor(s):(std):	LANGE FERDINAND
International class (IPC 8-9):	B65D5/20 B65D5/24 B65D85/10 (Advanced/Invention); B65D5/20 B65D85/08 (Core/Invention)
International class (IPC 1-7):	B31B49/02
CPC:	B65D5/2076 B65D5/241 B65D85/1036
European class:	B65D5/20E3 B65D5/24A B65D85/10G

Classification Explorer

Cited documents:	US2912153 A, US2506311 A, US2296664 A, US2210443 A, GB559292 A, GB540533 A, FR848557 A, DE802566 A, DE623667 A, DE5524 A, CH191376 A, BE521344 A,
Forward Citations:	DE1260952,

Abstract:
Source: DE1211064A [Source: Claim 1] 1. Verfahren zum Herstellen von allseitig ge schlossenen Faltbehaeltern aus Zuschnitten mit umlaufender Randleiste bzw. Randzone durch Herunterklappen eines Deckels auf einen hoch gestellten Ansatz der gegenueberliegenden Seiten flaeche unter Bildung einer ersten Verschlussleiste und anschliessendem Verschweissen der uebrigen Verschlussleisten mit der ersten Verschlussleiste nach Patent 1104313, gekennzeichnet durch die Anwendung auf Zuschnitte mit der Moeglichkeit zum Falten von an zwei gegenueber liegenden Seitenwaenden angelenkten Faltflaechen in Form von Ecken- oder Seitenwandfaltdrei ecken oder von zu Verschlussleisten verbindbaren trapezfoermigen Resten abgeschnittener Seiten wandfaltdreiecke. [Source: Claim 1] . 1 A method of producing sides ge closed folding **containers** from blanks with a circumferential flange or rim by folding a lid on a superscript approach the opposite sides lying area to form a first **sealing** strip and subsequent welding of the rest **closure** strips with the first **closure** strip according to Patent 1104313, characterized by corners on the application blanks with the possibility of folding lying on two opposite Seitenwaenden hinged folding surfaces in the form of corner or Seitenwandfaltdrei or wandfaltdreiecke of connectable to **sealing** strips trapezfoermigen residues truncated sides.



188) Family number: 22649633 (US3236021A)

Title:	METHOD AND APPARATUS FOR FORMING AND FILLING RECEPTACLES
Priority:	US19630261795 19630228

Family:

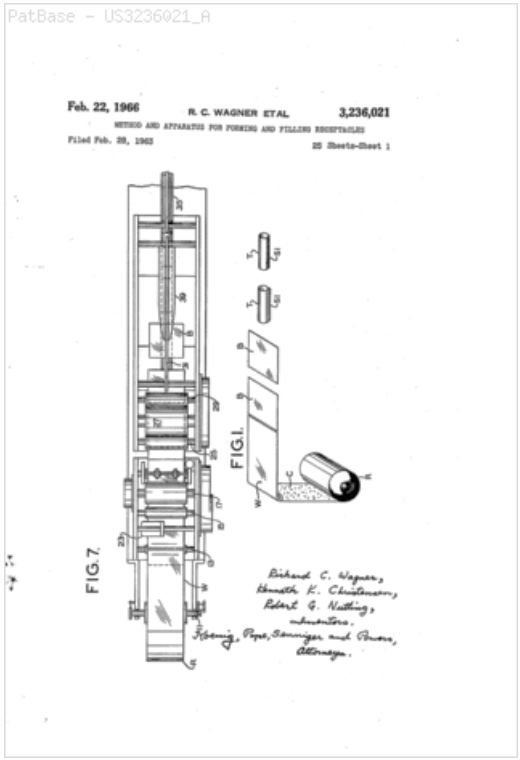
Publication number	Publication date	Application number	Application date
US3236021 A	19660222	US19630261795	19630228

Probable Assignee:	PACKAGING FRONTIERS INC
Assignee(s):(std):	PACKAGING FRONTIERS INC
Inventor(s):(std):	WAGNER RICHARD C ; NUTTING ROBERT G ; CHRISTENSEN KENNETH K
International class (IPC 8-9):	B65B3/02 B65B9/20 (Advanced/Invention); B65B3/00 B65B9/10 (Core/Invention)
International class (IPC 1-7):	B65B3/02 B65B9/10
CPC:	B65B3/02 B65B39/145 B65B43/08 B65B43/50 B65B51/144 B65B61/08 B65B65/003 B65D75/50
European class:	B65B3/02 B65B39/14B B65B43/08 B65B43/50 B65B51/14C B65B61/08 B65B65/00B B65D75/50
US class:	53/272 53/456 53/547 53/563

Classification Explorer

Cited documents:	US2926474 A, US2838795 A, US2837795 A, US2741079 A, US2643496 A,
Forward Citations:	WO11117751, US9623988, US5548947, US5442897, US4881360, US4817366, US4429513, US3710541, US2013172165, US2010072205, RU2556915, JP5806729, JP2013523115, AT515536, AT515536,

Abstract:
Source: US3236021A (Claim 1) 1. Packagin.- apparatus comprising conveyor means for carrying **open**-ended titbes one a:fter another along a predetermined path with each tube at an angle to horizontal for being filled through its upper end, means for closing the lower end of each tub-_ as it proceeds along said path, means for filling each tube through its upper end as it proceeds farther along said path, and means for closing the upper end of each tube as it proceeds farther along said path after the filling thereof, the means for closing the lower ends of the tubes the filling means and the means for closing the upper en_s of the tubes being movable with said conveyor means.



189) Family number: 21354134 (US3301464A)

Title: **CONTAINER** AND LID

Priority: US19640349071 19640303

Family:

Publication number	Publication date	Application number	Application date
AU5528765 A1	19660818	AU19650055287	19650217
DE1486478 A1	19690604	DE1965L050104	19650302
DE1486478 B2	19740321	DE1965L050104	19650302
DE1486478 C3	19741031	DE1965L050104	19650302
DE1786586 A1	19740404	DE19651786586	19650302
FR1429570 A	19660225	FR19650007640	19650302
GB1087437 A	19671018	GB19650007609	19650222
US3301464 A	19670131	US19640349071	19640303

Probable Assignee: LILY TULIP CUP CORP

Assignee(s):(std)**:** LILY CUPS OVERSEAS LTD ; LILY TULIP CUP CORP

Assignee(s): SWEETHEART CUP CO INC ; LILY CUPS OVERSEAS LTD TORONTO ONTARIO KANADA ; BANKERS TRUST CO ; BANKERS TRUST CO COLLATERAL AGENT AS ; LILY CUPS OVERSEAS LIMITED

Inventor(s):(std)**:** W AMBERG STEPHEN ; AMBERG STEPHEN WALTER ; AMBERG STEPHEN W

Inventor(s): WALTER AMBERG STEPHEN ; STEPHEN WALTER AMBERG ; AMBERG STEPHEN WALTER ST JAMES NY VSTA ; AMBERG STEPHEN WALTER ST JAMES N Y V ST A

International class (IPC 8-9): B65D39/04 B65D43/02 B65D43/06 B65D51/20 B65D77/20 (Advanced/Invention)

International class (IPC 1-7): B65D17/16 B65D39/04 B65D85/72

CPC: Y02W90/11 B65D51/20 B65D43/021 B65D43/0212 B65D2251/0018 B65D2251/0093 B65D2543/00092 B65D2543/00231 B65D2543/00268 B65D2543/00296 B65D2543/00314 B65D2543/00398 B65D2543/00416 B65D2543/00509 B65D2543/00537 B65D2543/00555 B65D2543/0062 B65D2543/00638 B65D2543/00685 B65D2543/00731 B65D2543/00796 Y02A40/961

European class: B65D43/02S3D B65D43/02S3E B65D51/20 L65D251/00Y2F L65D251/00Y6M L65D543/00Y1F2C L65D543/00Y1H L65D543/00Y1M10 L65D543/00Y1M2 L65D543/00Y1M6 L65D543/00Y2K L65D543/00Y2K3 L65D543/00Y8D1C L65D543/00Y8D3 L65D543/00Y8D5 L65D543/00Y8S1B2 L65D543/00Y8S1B6 L65D543/00Y8S1D2 L65D543/00Y8S3B2 L65D543/00Y8S3D2

US class: 229/125.17 D9/454

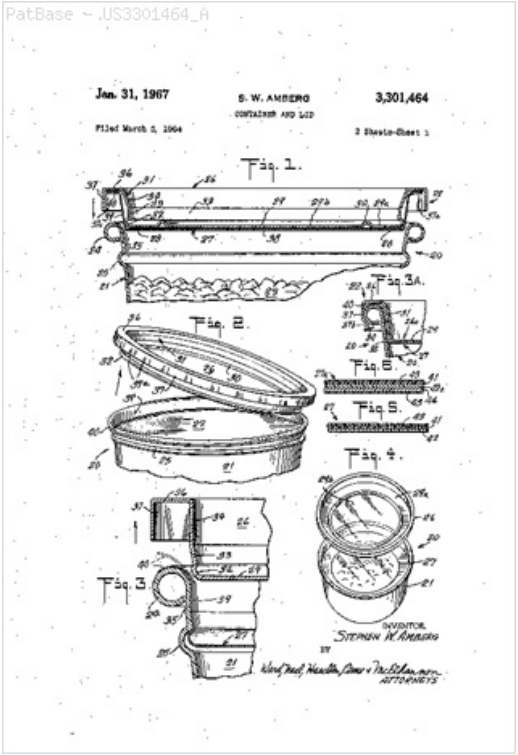
Classification Explorer

Cited documents: US3070275 A, US2787410 A, US2721686 A, US2402943 A, US2290749 A, US2241710 A,

Forward Citations: WO9905040, WO12046215, WO10116223, WO10116223, WO07107580, WO06018611, USD689771, USD682108, USD669781, USD649049, USD647400, USD643718, USD641623, USD641622, USD641239, USD480304, USD471453, USD468206, USD452155, USB337023, US9714114, US9126714, US9011307, US8939308, US7735674, US6430900, US6227401, US4676392, US4207725, US4127187, US4101047, US4055672, US4013188, US3955006, US3734276, US3620437, US3616962, US3464832, US3394861, US2011056945, US2010276437, US2006124654, US2004159080, RU2589669, RU2476359, ITMI20101845, ITMI20090594, GB2134893, GB2123392, FR2679528, FR2372742, FR2284528, EP1095868, EP0878409, EP0277080, EP0224908, EP0001690, DE2944344, DE19850138, DE1611956,

Abstract:
Source: GB1087437A An adhesive, for **sealing** a **closure** of impervious material e.g paper, to a receptacle part of wax-coated or wax-impregnated paper, or of plastics, may be of a non-blocking blend, e.g. 70 percent by weight of fully refined paraffin wax having an ASTM melt point of 132-134 DEG F. and 30 percent by weight of a vinyl acetate ethylene copolymer having a melt index of 12-18, said copolymer containing from about 27 percent to about 29 percent by weight vinyl acetate, or it may be of a tacky composition, e.g. 63 percent by weight of an intermediate wax having an ASTM melt point of 157-167 DEG F., 8 percent by weight butyl rubber, 19 percent by weight laminating micro wax having an ASTM congealing point of 141 DEG F. and 10 percent by weight polyisobutylene having an average molecular weight of from 8700-10,000, in which case it is coated with starch, or with a sheet of tissue paper.ALSO:An adhesive, for **sealing** a **closure** of impervious material e.g paper, to a receptacle part of wax coated or wax impregnated paper, or of plastics, may be of a non-blocking blend, e.g. 70 percent by weight of fully refined paraffin wax having an ASTM melt point of 132-134 DEG F. and 30 percent by weight of a vinyl acetate-ethylene copolymer having a melt index of 12-18, said copolymer containing from about 27 percent to about 29 percent by weight vinyl acetate, or it may be of a tacky composition, e.g. 63 percent by weight of an intermediate wax having an ASTM melt point of 157-167 DEG F., 8 percent by weight butyl rubber, 19 percent by weight laminating micro-wax having an ASTM congealing point of 141 DEG F and 10 percent by weight polyisobutylene having an average molecular weight of from 8700-10,000, in which case it is coated with starch, or with a sheet of tissue paper.

PatBase ~ US3301464_A



190) Family number: 22289647 (FR1461469A)

Title:	EMBALLAGE REMPLI ET SCELLE AINSI QUE SON PROCEDE DE FABRICATION FILLED AND **SEALED PACKAGE** AND MANUFACTURING METHOD THEREOF (Machine translation)
Priority:	FR19650029799 19650830

Family:

Publication number	Publication date	Application number	Application date
FR1461469 A	19660225	FR19650029799	19650830

Probable Assignee:	TEPAR AG
Assignee(s):(std):	TEPAR AG
International class (IPC 8-9):	B65D5/06 B65D5/60 (Advanced/Invention); B65D5/02 B65D5/56 (Core/Invention)
International class (IPC 1-7):	B65D31/04
CPC:	B65D5/062 B65D5/068 B65D5/606
European class:	B65D5/06B1 B65D5/06D1 B65D5/60B2

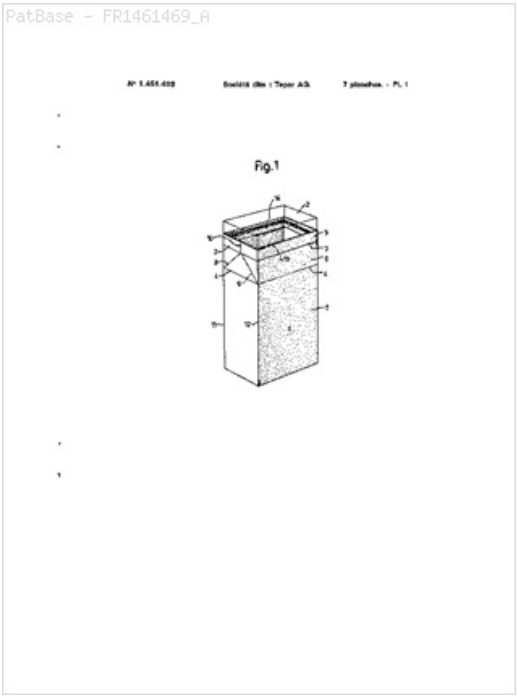
Classification Explorer

Forward Citations: WO13141355, USD730172, JP2013141355, FR2815619, FR2369166,

Abstract:
Source: FR1461469A [Source: Claim 1] **ATTENTION** debut du champ CLMS peut contenir fin de DESC **. dans des chambres steriles speciales dont il est difficile de garantir l'absolue sterilite. Bien entendu, l'invention n'est nullement limitee au mode de realisation decrit et represente, elle est susceptible de nombreuses variantes accessibles a l homme de I'art, suivant les applications envisagees et sans s'ecarter pour cela de l'esprit de l'invention. C'est ainsi que l'on peut, sans que cela soit ni tres pratique, ni tres necessaire, fixer le sac interieur sur une portion de la paroi interne de la boite plus large que la zone d'adherence 14 de l'exemple decrit. En outre, il n'est pas necessaire de replier le panneau superieur 6 jusqu'a obtention d'une surface superieure plane. On choisit de souder le sac interieur 2 le long de la zone de soudure 17 qui est situee en dehors de l'arete 21 repliee en soufflet pour une simple raison pratique car il est plus facile d'etablir une soudure robuste entre deux pellicules plastiques simples qu'entre deux soudures plastiques recouvertes des deux cotes par une couche de carton isolante a la chaleur. Bien entendu, on peut souder le sac 2 le long d'une zone de soudure situee au niveau de l'arete 21 mais ce procede presentant certains inconvenients n'a pas ete utilise dans le mode de realisation represente. Il est quelquefois difficile de chauffer la paroi de la boite de facon que le tube plastique puisse adherer a la boite sans que la pellicule qui le 'cons titue soit detruite par fusion de sa paroi trop mince. Il peut donc etre necessaire de fixer le tube plas tique a l'interieur de la boite au moyen de colle. Comme il est presque impossible d'utiliser une colle ordinaire a cet effet, on a tente d'employer une colle a chaud fondue qui est activee par la chaleur. Du fait que cette colle est activee par la chaleur, les dispositifs precites utilises pour faire adherer le tube plastique a la paroi de la boite peuvent servir, mais le degre de chauffage doit etre adapte aux proprietes du materiau utilise. RESUME L'invention a pour objet: 1" Un emballage rempli et scelle compose d'une boite exterieure en carton ou en un materiau rigide et pliable analogue et d'un sac interieur dispose dans ladite boite et renfermant la substance de remplissage, ledit sac interieur etant constitue par une pellicule plastique souple thermosoudable, ladite boite exterieure consistant en un tube comportant un fond et une zone marginale superieure repliee sur l'ouverture dudit tube, ledit emballage etant remarquable en ce que le sac interieur a une circonference externe sensiblement identique a la circon ference interne de ladite boite, et en ce que au moins des portions de la paroi externe dudit sac s'appliquent et sont fixees sur la paroi interne de ladite boite dans ladite zone marginale; 2" Un mode de realisation de l'emballage defini en 1", dans lequel la zone marginale de la boite exterieure est repliee en forme de soufflet et aplatie de maniere a constituer une arete; 3 Un autre mode de realisation de l'emballage defini en 10 ou 2", dans lequel le sac interieur est scelle le long d'une etroite zone de soudure situee a l'exterieur de la boite; 4" Un nouveau mode de realisation de l'emballage defini en l'un quelconque des paragraphes precedents, dans lequel le sac est maintenu aplati par l'arete et est scelle le long d'une zone de soudure exterieure a ladite arete; 5 Encore un mode de realisation de l'emballage defini en 10, dans lequel le tube formant la boite exterieure comporte quatre panneaux se faisant face deux par deux et disposes suivant une section transversable rectangulaire, ladite boite portant un trace de rainures destinees a faciliter son pliage en soufflet et comprenant deux rainures espacees sensiblement paralleles entourant la partie superieure dudit tube et divisant chacune des parois du tube ouvert en trois panneaux sensiblement rectangulaires, a savoir a partir de l'orifice du tube: une zone marginale, un panneau superieur et un panneau lateral, deux des parois opposees dudit tube comportant en outre un trace de rainures ayant la forme d'un Y renverse, les deux extremites des branches obliques et descendantes du Y etant situees dans les angles inferieurs des panneaux superieurs et sa jambe verticale et montante etant situee dans la zone marginale et aboutissant perpendiculairement au bord libre de ladite zone en un point central de ladite zone, ledit trace definissant l'ouverture de l'emballage, le point d'intersection des branches du Y et de sa jambe etant situe sur la rainure separant le panneau superieur de la zone marginale; 6" Un mode de realisation de l'emballage defini en 5, dans lequel le panneau superieur pourvu du trace de rainures destinees a faciliter le pliage en soufflet de la boite a, dans le sens circonferentiel du tube, une largeur inferieure a celle des panneaux superieurs adjacents; 7" Un autre mode de realisation de l'emballage defini en 50, dans lequel l'angle defini par les branches obliques descendantes du trace en Y est sensiblement de 90; 8" Un nouveau mode de realisation de lnembal- lage defini en 5, dans lequel les deux grands panneaux superieurs opposes sont replies sur l'orifice du tube de maniere a former un dessus sensiblement plat, l'arete assemblant lesdits panneaux 'etant rabattue pour venir en contact avec le dessus de la boite; 9" Encore un mode de realisation de l'emballage defini en 1", dans lequel le materiau qui constitue la boite est recouvert d'une pellicule externe thermoplastique destinee a proteger ledit emballage de l'humidite ambiante et a faciliter la fixation des panneaux delimitant la boite de maniere a ce qu'ils demeurent en position repliee; 10 Un mode de realisation de l'emballage defini en 1, dans lequel la zone marginale de la boite definissant l'arete de ladite boite est perforee le long d'une fente continue ou discontinue s'etendant sensiblement dans le sens circonferentiel par rapport a ladite zone marginale sur toute la zone marginale des panneaux comportant les soufflets et sur une partie de la zone marginale des panneaux adjacents, le sac interieur etant fixe a l'interieur de ladite boite dans la partie de la zone marginale qui contient la fente; 11" Un autre mode de realisation de l'emballage defini en 10, dans lequel la fente s'etend sur une ligne disposee le long de L'arete formee par pliage en soufflet de la zone marginale; 12" Un nouveau mode de realisation de l'emballage defini en 11, dans lequel ledit emballage est ouvert par arrachage d'une partie de l'arete le long de la fente disposee dans ladite arete, le sac renferme dans la boite etant egalement dechire dans une zone situee au dessous de sa soudure et les plis en forme de soufflets decouverts par l'operation d'arraehage etant ecartes pour former un bec verseur de forme sensiblement rhomboidale; 13 Encore un mode de realisation de l'emballage defini en 5 et 120, dans lequel chacun des panneaux superieurs rectangulaires comporte une rainure s'tetendant de l'angle forme par l'arete verticale adjacente au bec verseur de la boite et le panneau lateral jusqu'a l'extremite de la fente disposee dans l'arete pour servir d'encoche d'ouverture; 140 Un mode de realisation de l'emballage defini en run quelconque des paragraphes precedents, dans lequel on fixe ensemble les parties externes de l'arete qui se font face lorsque les soufflets sont replies tandis que les parties internes de ladite arete qui se font face sont separees par le sac interieur; 15 Un autre mode de realisation de l'emballage defini en l'un quelconque des paragraphes preee- dents, dans lequel, dans la zone de l'arete contenant la fente, on fixe ensembIe les parties externes de l'arete qui se font face lorsque les soufflets sont replies dans la zone situee au-dessus de la fente disposee dans ladite arete; 16 Encore un mode de realisation de l'emballage defini en l'un quelconque des paragraphes precedents, dans lequel la soudure qui relie les parties externes de l'arete qui se font face lorsque le soufflet est replie est plus resistante dans le pli qui ne contient pas la fente que dans celui qui la contient; 170 Un procede de fabrication d'un emballage tel que defini en 10 qui consiste: a alimenter en substance de remplissage un manchon ou sac soude a son extremite inferieure et constitue par une pellicule plastique souple thermosoudable, en meme temps qu'on enfonce ladite extremite inferieure du manchon plastique dans un tube en materiau rigide comportant un fond; a chauffer au moins en partie le cote interne de la zone marginale du tube rigide a une temperature telle que les parties exterieures du manchon plastique qui se trouvent en face de ladite zone chauffee fondent ou se ramollissent suffisamment pour que le manchon plastique adhere a l'interieur du tube rigide au moins dans lesdites parties de ladite zone marginale; a souder la partie superieure du manchon plastique, avantageusement en meme temps qu'on ferme Ie dessus du tube rigide ou boite en le pliant en soufflet, le long d'une etroite zone de soudure situee a l'extremite de l'arete formee au cours de l'operation de fermeture du tube rigide; et a separer du reste du manchon plastique le sac interieur constitue par l'operation de soudure et renferme dans le tube rigide ou boite, en le sectionnant le long de ladite zone

de soudure; 189 Un mode de mise en oeuvre du procede defini en 170 qui consiste a effectuer la fixation de la face externe du sac sur la face interne de la boite en meme temps qu'on replie en soufflet la zone marginale de la boite et qu'on aplatit et qu'on soude l'arete; 19 Un autre mode de mise en oeuvre du procede defini en 170, qui consiste a fabriquer le manchon plastique par extrusion au moyen d'un orifice d'extrusion annulaire et a alimenter ledit manchon en substance de remplissage au moyen d'un tuyau d'alimentation dispose concentriquement par rapport audit orifice d'extrusion; 200 Un nouveau mode de mise en oeuvre du procede defini en 170 qui consiste a chauffer au moins certaines parties de la face interne de la zone marginale de la boite avant d'introduire le sac plastique dans ladite boite, au moyen d'air chaud qu'on envoie sur ladite zone marginale; 210 Encore un mode de mise en oeuvre du procede defini en 170, qui consiste a chaufferas moins certaines parties de la face interne de la zone marginale de la boite avant d'introduire le sac plastique dans ladite boite, au moyen de machoires chauffees qu'on presse contre la surface externe de ladite zone marginale; 22 Un mode de mise en oeuvre du procede defini en 170, qui consiste a empecher le sac plastique de venir en contact avec la zone d'adherence chauffee prealablement au moyen d'un ecran ou d'un autre dispositif protecteur pendant qu'on enfonce ledit sac plastique dans la boite; 23 Un autre mode de mise en oeuvre du procede defini en 170, qui consiste a maintenir dans le sac plastique une pression superieure a la pression atmospherique au moment de son introduction dans la boite ou au moins juste apres, de maniere que les parois dudit sac plastique soient bien appliquees sur la zone d'adherence chauffee de ladite boite; 240 Un nouveau mode de mise en ceuvre du pro. cede defini en 230, qui consiste a maintenir dans le sac plastique une pression superieure a la pression atmospherique de 0,001 a 1 atmosphere; 25 Encore un mode de mise en oeuvre du procede defini en 170, qui consiste a steriliser l'interieur du sac plastique et a introduire, de facon aseptique, dans ledit sac, un liquide prealablement sterilise; 26 Un mode de mise en oeuvre du procede defini en 17, qui consiste a appliquer sur la face interne de la zone marginale de la boite une couche de colle L J fondue ou analogue, ladite colle etant activable a chaud, et chauffee a une temperature suffisante pour faire adherer le sac plastique contre la paroi interne de la zone marginale de ladite boite; 270 A titre de produit industriel nouveau, tout emballage presentant au moins une des caracteristiques decrites dans les paragraphes 10 a 260 du present resume. [Source: Claim 1] ** WARNING ** start of CLMS field may contain end of DESC **. in special sterile rooms, it is difficult to guarantee the absolute sterility. Of course, the invention is not limited to the realization mode described and represented, it is susceptible to many variants al man I'Art, following envisaged applications and to depart without it for the spirit of the invention. This is how it is possible, without this being neither very practical nor very necessary, fixing the inner **bag** over a portion of the inner wall of the larger **box** than the adhesion area 14 of the The example described. Moreover, it is not necessary to fold the upper panel 6 until obtaining a flat top surface. Inside the **bag** is chosen to weld 2 along the weld zone 17 which is situated outside the ridge 21 folded bellows for a simple reason convenient as it is easier to establish a robust weld between two single plastic film between two plastic welds **covered** on both sides by an insulating paperboard layer to heat. Of course, one can weld the **bag** 2 along a weld zone situated at the ridge 21 but such process presenting some drawbacks has not been used in the realization of fashion represents. It is sometimes difficult to heat the wall of the **box** way that the plastic tube can accede to the **box** without the film that the 'con sti tutes be destroyed by melting its too thin wall. It may therefore be necessary to secure the tube plas tick inside the **box** with glue. As it is almost impossible to use an ordinary glue for this purpose, we have tried to use a hot glue has melted which is activated by heat. As this adhesive is activated by heat, the above using devices to adhere the plastic tube to the wall of the **box** can be used, but the heating degree must be adapted to the properties of the material used. SUMMARY The invention relates to: 1 "A filled **package** and **seals** consists of external cardboard **box** or a rigid material and the like and a collapsible inner **bag** disposed within said **box** and containing the filling material, said inside **bag** being constituted by a flexible heat-**sealable** plastic film, said outer **box** consisting of a tube having a bottom and an upper edge region folded over the **opening** of the tube, said **package** being remarkable in that the interior **bag** has a substantially identical outer circumference has the circum ference of said inner **box**, and in that at least portions of the outer wall of said **bag** apply and are fixed on the inner wall of said **box** in said edge area; 2 "A **packaging** EMBODIMENT defined in 1", in which the marginal zone of the outer **box** is folded bellows-shaped and flattened manner to constitute an edge; 3 Another embodiment of the **packaging** defined in 10 or 2 "in which the interior **bag** is **sealed** along a narrow weld area situated on the outside of the **box**; 4 "A new **packaging** EMBODIMENT defined in any of the preceding paragraphs, in which the **bag** is kept flattened by the ridge and is **sealed** along an outer weld zone has said arete 5 Another embodiment of the **packaging** defined in 10, wherein the tube forming the outer **box** has four panels facing pairs and willing transversable a rectangular section, said **box** with a trace destinies grooves to facilitate its folding bellows and comprising two substantially parallel spaced grooves surrounding the upper portion of said tube and dividing each of the **open** of the tube walls into three substantially rectangular panels, ie from the orifice of the tube: a marginal area, a panel upper and a lateral panel, two opposed walls of said tube further comprising a track grooves having the shape of an inverted Y, the two ends of the oblique and descending branches of the Y being located in the lower corners of the upper panels and leg vertical rising and being located in the edge region and terminating perpendicular to the free edge of said area at a central point of said area, said track defining the **opening** of the **package**, the intersection of the branches of the Y and leg being located in the groove separating the upper panel of the marginal region; 6 "A **packaging** EMBODIMENT defined in 5 wherein the upper panel provided with the groove track destinies to facilitate the gusset folding **box** has, in the circumferential direction of the tube has a lower width that of adjacent panels superiors; 7 "Another embodiment of the **packaging** defined in 50, wherein the angle defined by the downward sloping branches of the track Y is substantially 90; 8 "A new Inembal- spinning EMBODIMENT defined in 5, in which the two major superiors opposing panels are replies to the hole in the manner of a tube forming a substantially flat top, the ridge joining said panels' being folded to come into contact with the top of the **box**; 9 "Another embodiment of the **packaging** Set in 1 ", in which the material constituting the **box** is **covered** with a thermoplastic outer skin destiny has said protecting **packaging** of ambient moisture and facilitate attachment of the panels delimiting the **box** way has that they remain in the folded position; 10 A **Package** EMBODIMENT defined in 1, wherein the edge region of the **box** defining the ridge of the said **box** is perforated along a continuous or discontinuous slot extending substantially in the circumferential direction with respect to said edge region over the entire marginal area of the panels having the bellows and part of the edge region of the adjacent panels, the inner **bag** being fixed on the inside of said **box** in the part of the edge region which contains the slot; 11 "Another embodiment of the **packaging** defined in 10, wherein the slit extends along a line disposed along the edge formed by bellows-folding of the edge zone; 12 "A new embodiment of the **packaging** defined in 11, wherein said **package** is **opened** by tearing a portion of the ridge along the ridge PREPARED slot in said the **bag** contained in the **box** being also ripped situated in an area below its welding and bellows-shaped folds overdrafts by the arraehage being ecards operation to form a spout substantially rhombic shape; 13 Another embodiment of the **packaging** defined in 5 and 120, wherein each of the panels includes a rectangular superiors s'tetendant groove of the angle formed by the vertical ridge adjacent to the spout of the **box** and the panel until the lateral extremity of the slot in the ridge WILLING to serve as an **opening** notch; 140 One embodiment of the **packaging** defined in any run of the preceding paragraphs, in which together we fixed the external parts of the ridge facing each other when the bellows are replies while the inner portions of said ridge which face are separated by the interior **bag**; 15 Another **packaging** EMBODIMENT defined in any of paragraphs preee- teeth, wherein in the region of the ridge containing the slot, the outer portions are fixed to the ridge ensembIe which face each other when the bellows are folded into the area situated above the PREPARED slot in said ridge; 16 Another embodiment of the **packaging** defined in any of the preceding paragraphs, in which the solder that connects the external parts of the ridge facing each other when the bellows folds is more resistant in the bend that does not contain the slot than one that contains it; 170 A method for manufacturing such a **package** as defined in 10 which comprises: a supplying filler sleeve or soda **bag** at its lower end and is of a flexible plastic film heat-**sealable**, at the same time that sinking said lower end of the plastic sleeve into a tube of rigid material having a bottom; a heat at least partly the inner side of the edge region of the rigid tube to a temperature such that the External parts of the plastic sleeve that are opposite said heated area melt or soften sufficiently for the plastic sleeve adhered to the inside the rigid tube at least in said portions of said edge zone; soldering the upper part of the plastic sleeve, preferably at the same time that farm Ie above the rigid tube or **box** by folding bellows, along a narrow weld zone situated at the tip of the edge formed at during the rigid tube of the **closure** operation; and separating the rest of the plastic **bag** inside the sleeve constitutes the welding operation and contained in the rigid tube or **box**, in the severing along said weld zone; 189 An embodiment of the method defined in 170 that is to perform the connection of the outer face of the **bag** on the inside of the **box** at the same time that folds into the bellows edge area of the **box** and it flattens and soda that the ridge; 19 Another implementation of the method defined in 170, which is to manufacture the plastic sleeve by extrusion through an annular extrusion orifice and supply said filler sleeve by means of a supply pipe concentrically disposed relative to said extrusion orifice; 200 A new embodiment of the method defined in 170 that is to heat at least parts of the inner face of the edge region of the **box** before introducing the plastic **bag** into said **box**, by means of hot air being sent over the edge zone; 210 Another implementation of the method defined in 170, which is to chaufferas least parts of the inner face of the edge region of the **box** before introducing the plastic **bag** into said **box**, by means of jaws HEATED that press against the outer surface of the edge zone; 22 An embodiment of the method defined in 170, which is to prevent the plastic **bag** from coming into contact with the area of adhesion heated beforehand by means of a screen or other protective device during that one sinks said plastic **bag** in the **box**; 23 Another implementation of the method defined in 170, which is to maintain in the plastic **bag** a superior pressure to atmospheric pressure at the time of its introduction in the **box** or at least just after, in such a manner that walls of the plastic **bag** are properly applied on the heated adhesion area of said **box**; 240 A new mode of implementation of the pro ceuvre. cede defined in 230, which is to maintain in the plastic **bag** has an upper pressure atmospheric pressure of 0.001 to 1 atmosphere; 25

Another implementation of the method defined in 170, which is to sterilize the inside of the plastic **bag** and introduce aseptic manner in said **bag**, liquid sterilized beforehand; 26 An embodiment of the method defined in 17, which consists in applying on the inner face of the edge region of the **box** a glue layer The molten J or the like, said activatable adhesive being hot, and heated to a temperature sufficient to adhere the plastic **bag** against the inner wall of the edge zone of said **box**; 270 As a new industrial product, any **packaging** presenting at least one of the characteristics described in paragraphs 10 to 260 of this summary.



191) Family number: 21354196 (US3274631A)

Title:	ELECTRIC CORDLESS TOOTHBRUSH
Priority:	US19640353327 19640320 US19660523681 19660128

Family:

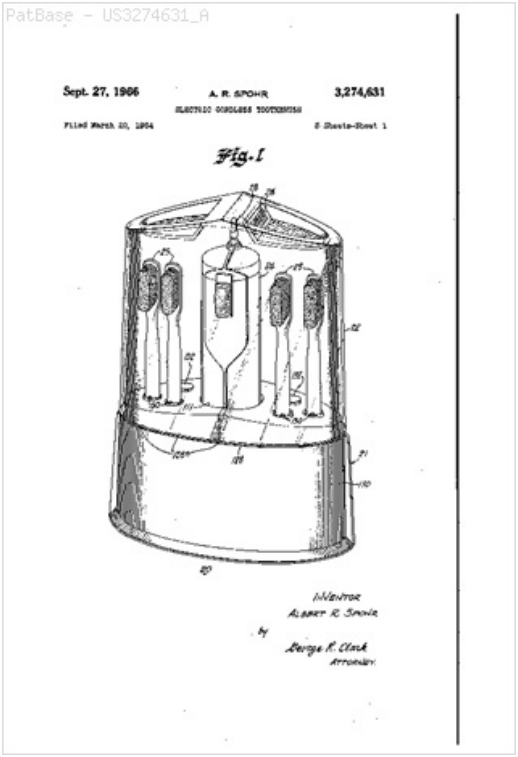
Publication number	Publication date	Application number	Application date
DE1284392 B	19681205	DE1965S095812	19650306
FR1429572 A	19660225	FR19650007772	19650303
GB1073894 A	19670628	GB19650010866	19650315
US3274631 A	19660927	US19640353327	19640320
US3463994 A	19690826	US19660523681	19660128

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Assignee(s):(std)**:**	SUNBEAM CORP
Inventor(s):(std)**:**	SPOHR ALBERT R ; RICHARD SPOHR ALBERT
Inventor(s):	ALBERT R SPOHR
International class (IPC 8-9):	A61C17/22 A61C17/34 H01H13/08 H02J7/00 H02J7/02 (Advanced/Invention)
International class (IPC 1-7):	H02J7/10
CPC:	H02J5/00 H02J7/02 A61C17/225 A61C17/22 A61C17/224 A61C17/3418 H01H13/08 H02J7/0042 H02J7/025
European class:	A61C17/22 A61C17/22E A61C17/22H A61C17/34A1 H01H13/08 H02J7/00E H02J7/02B1
US class:	15/22.1 200/293.1 200/302.1 206/223 206/369 320/115 320/2

Classification Explorer

Cited documents:	US989191 A, US3156936 A, US3156804 A, US3143697 A, US3142852 A, US3132227 A, US3104405 A, US3072938 A, US3005141 A, US3005090 A, US2991376 A, US2880737 A, US2875458 A, US2158738 A, IT577198 A, FR1345588 A, FR1300844 A, CH373351 A, CA671982 A,
Forward Citations:	WO10067328, WO05046508, WO03065838, USD798060, USD767896, USD758966, USD757439, USD736701, USD723912, USD639068, USD632491, USD632490, USD632090, USD623411, USD500599, USD487349, USD484311, USD476743, US9573264, US9468511, US9186229, US9144477, US8943634, US8533886, US8522973, US8460816, US8237402, US8174234, US8174233, US8051520, US8022775, US7836538, US7721371, US7667433, US7614107, US7198487, US7102328, US7049790, US6955539, US6920659, US6821119, US6722498, US6558035, US6554614, US5979850, US4592144, US4374354, US4137588, US3874506, US3715544, US3654415, US3577579, US3533119, US2012318689, US2011147021, US2011086256, US2011084752, US2011084654, US2011084653, US2011084652, US2010154152, US2010017978, US2008295266, US2008222822, US2006248666, US2006150350, US2005144744, US2005104556, GB2282715, GB2212570, GB2212570, FR2683713, FR2496430, FR2346767, FR2346767, EP2196168, EP1530955, EP0468241, EP0468241, DE4022642, DE3019886, DE29721015, DE102009037324, CN102245123,

Abstract:
Source: US3274631A 1,073,894. Toothbrushes. SUNBEAM CORPORATION. March 15, 1965 [March 20, 1964], No. 10866/65. Heading A4K. [Also in Division H2] In a cordless electric toothbrush, a casing 24 houses a rechargeable battery 97, an electric switch 75a, 76a and an electric motor 38 whose rotary movement is converted to oscillatory movement of an output shaft 28 by means of a drive mechanism 48. The shaft 28 is oscillated by a drive fork 64 engaging a spindle 63, which is rotated by the motor 38 via gear 62 and pinion 61. The motor 38 is in coaxial relationship with the battery 97 and is separated therefrom by a flanged partition cup 98. To prevent moisture entering the casing 30 a drive shaft **seal** 86 and a resilient switch **seal** 94 are provided. To operate switch 75a, 76a a switch slide 92 is moved upwardly so that a switch spring 93 is cammed out of a notch 96 in the slide 92 thereby stretching the **seal** 94 and pushing switch contact 75a into engagement with contact 76a. The battery may be recharged by inserting the casing into a transformer diode charging **unit** (21) (Fig. 11, not shown) so that battery terminals (104, 105) fit around contacts (113, 114).



192) Family number: 29881327 (US3338401A)

Title: MOLDED SUTURE **PACKAGE**

Priority: FR19650012348 19650407 US19640416368 19641207

Family:

Publication number	Publication date	Application number	Application date
DE1466808 A1	19690508	DE19651466808	19651204
FR1430634 A	19660304	FR19650012348	19650407
FR89092 E	19670505	FR19650040814	19651203
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NL6515858 A	19660608	NL19650015858	19651207
SE324033 B	19700519	SE19650015744	19651206
US3338401 A	19670829	US19640416368	19641207

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Inventor(s):(std)**:** REGAN P ; REGAN JR PAUL E ; R EDDINGFIELD JUN PAUL

Inventor(s): R EDDINGFIELD JUN ; JR PAUL E REGAN

International class (IPC 8-9): A61B17/06 (Advanced/Invention); A61B17/06 (Core/Invention)

International class (IPC 1-7): A61L17/02

CPC: A61B17/06133 A61B17/06138

European class: A61B17/06P4 A61B17/06P4F

US class: 206/63.3 D9/416

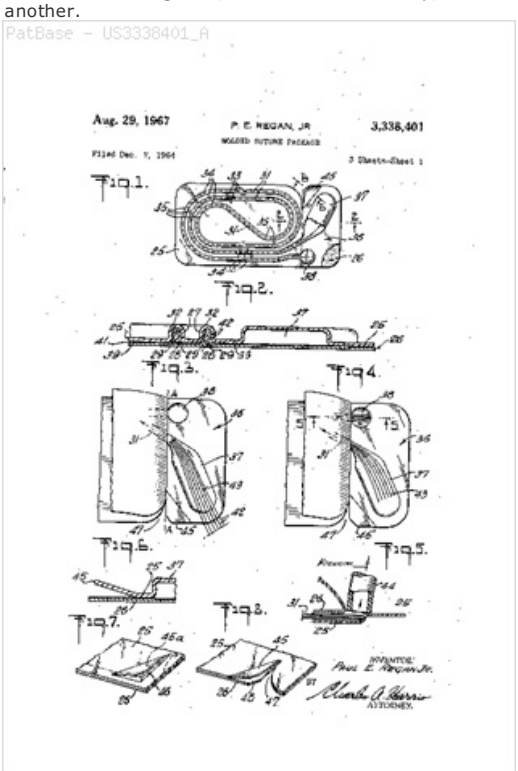
Classification Explorer

Cited documents: US2899046 A, US2615565 A, US2583043 A, GB188948 A,

Forward Citations: WO9117713, WO9117713, WO0058156, USD606856, US8889168, US8876864, US8518431, US8011499, US7967134, US7520383, US7137507, US6533112, US6481568, US6260699, US5819918, US5704469, US5669490, US5566822, US5560477, US5503266, US5468252, US5462162, US5435438, US5417036, US5407071, US5386912, US5366081, US5359831, US5277299, US5263585, US5261210, US5246104, US5222978, US5213210, US5165540, US5154283, US5129511, US5123528, US5099994, US5086914, US4903826, US4699271, US4369880, US4269310, US4120394, US3972418, US3939969, US3749238, US2012037183, US2010147708, US2009318962, US2009230002, US2005175133, US2004084331, FR2379288, EP1106142, EP1106142, EP0931511, EP0498093, EP0494637, EP0494081, EP0471458, EP0471441, EP0418059, EP0091792, EP0091792, DE3016606, DE2815644, DE2803409, DE2552831, DE2532992, AU576865,

Abstract:

Source: US3338401A ABSTRACT OF THE DISCLOSURE
This application discloses a molded suture **package** wherein one or more elongated sutures are contained in a coiled narrow passageway having a plurality of convo-lutions. In the preferred form disclosed, the **package** comprises a molded sheet and a **cover** sheet and the molded sheet defines a coiled channel having a plurality of convolutions. The channel is **open** to one side of the molded sheet and the **cover** sheet is **sealed** thereto continuously along both edges of the channel to form the aforesaid coiled passageway. The **package** of this invention also may include molded compartments and passages to facili-tate access to the sutures contained therein, to accommo-date needles attached thereto, or store sterilizing fluid, or the like. Preferably, the **package** is **opened** by stripping or separating portions thereof from one another.



193) Family number: 791742 (US3240430A)

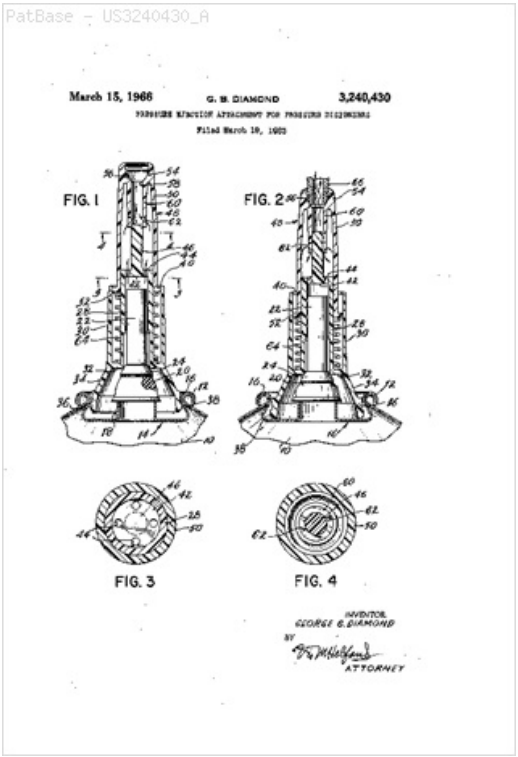
Title:	PRESSURE EJECTION ATTACHMENT FOR PRESSURE **DISPENSERS**
Priority:	US19630266409 19630319

Family:

Publication number	Publication date	Application number	Application date
CH441892 A	19670815	CH19640003546	19640319
DE1293091 B	19690417	DE1964D043932	19640319
GB1064684 A	19670405	GB19640011194	19640317
SE300541 B	19680429	SE19640003380	19640318
US3240430 A	19660315	US19630266409	19630319

Probable Assignee:	GLEN GARDNER CORP
Assignee(s):(std)**:**	DIAMOND G ; DIAMOND GEORGE B ; DIAMOND GEORGE BERNARD ; GLEN GARDNER CORP
Assignee(s):	GEORGE BERNARD DIAMOND
Inventor(s):(std)**:**	GEORGE B DIAMOND ; DIAMOND GEORGE B ; DIAMOND G
Inventor(s):	B DIAMOND GEORGE
International class (IPC 8-9):	B65D83/14 F16N21/04 F16N3/12 (Advanced/Invention); B65D83/14 F16N21/00 F16N3/00 (Core/Invention)
International class (IPC 1-7):	B05B9/04 B05B9/043 B67D5/12 F16N3/12
CPC:	B65D83/306 B65D83/756 F16N3/12 F16N21/04
European class:	B65D83/14Z6 B65D83/30C B65D83/756 F16N21/04 F16N3/12
US class:	141/352 222/378 222/394 222/402.2 239/579 239/89
Classification Explorer	
Cited documents:	US3123006 A, US3109558 A, US3067784 A, US3018929 A, US2945494 A, US2591962 A, US1923654 A, US1781493 A, DE876652 A, DD17408 A,
Forward Citations:	US5988231, US4944430, US4356848, US4239158, US4026336, US3733010, US3658214, US3504828, FR2640942, DE3718948,

Abstract:
Source: GB1064684A 1,064,684. Reciprocating pumps; syringes. G.B. DIAMOND. March 17, 1964 [March 19, 1963], No. 11194/64. Headings F1A and F1R, A high pressure **dispensing** attachment for a pressurized **container** 10, e.g. containing a fluid pressure actuated piston for discharging its contents, comprises a body member 30 mounted on the **container** discharge valve stem 22 and carrying a piston 46 slidable in a cylinder 60 carried by a nozzle member 48 slidable within member 30 against a spring 64. In operation, e.g. for supplying grease to a nipple, relative movement between the **container** and the attachment first **opens** the discharge valve 20 to fill cylinder 60 via stem 22 and ports 44 and 62. Further movement then telescopes nozzle 48 into member 30, so that piston 46 discharges cylinder 60.



194) Family number: 23014841 (US3240416A)

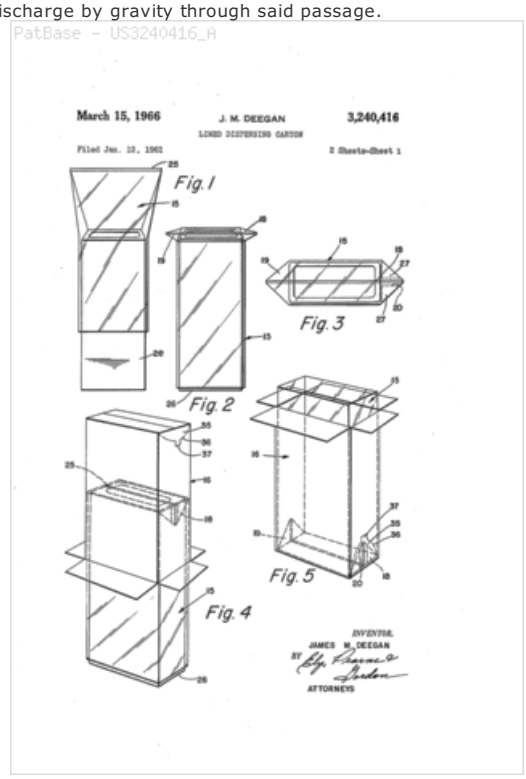
Title:	LINED **DISPENSING** CARTON
Priority:	US19610082251 19610112

Family:

Publication number	Publication date	Application number	Application date
US3240416 A	19660315	US19610082251	19610112

Probable Assignee:	DOW CHEMICAL CO
Assignee(s):(std):	DOW CHEMICAL CO
Assignee(s):	THE DOW CHEMICAL COMPANY
Inventor(s):(std):	DEEGAN JAMES M
International class (IPC 8-9):	B65D77/06 (Advanced/Invention); B65D77/06 (Core/Invention)
International class (IPC 1-7):	B65D5/60
CPC:	Y10S383/906 B65D77/065 B65D77/064
European class:	B65D77/06B1 B65D77/06B2
US class:	229/117.3 229/122.1 229/242 383/66 383/906
Classification Explorer	
Cited documents:	US3062427 A, US2954901 A, US2933229 A, US2930517 A, US2898027 A, US2758520 A, US2635788 A, US2446308 A, US2423804 A, US2382536 A, US2339156 A, US2321655 A,
Forward Citations:	WO09060087, WO03084838, US6227440, US4365737, US3887125, US3333758, US2016060012, US2011110613, US2011036864,

Abstract:
Source: US3240416A (Claim 1) A **dispensing** **package** comprising a relatively less flexible outer **container**, a relatively flexible leakproof liner incased in said **container**, and fiowable contents contained within said liner, said liner being closed at both ends and having a portion of one closed end folded to pro- vide an outwardly extendable portion of said liner communicating with the interior thereof, said outwardly extendable portion being confined, before discharge of said contents from the **package**, between said liner and said outer **container**, a relatively weakened portion of said outer **container** overlying said extendable portion of said liner, and adjacent sections of said outwardly extendable portion of said liner being **sealed** together to define, by the unsealed remainder of the portion, an outwardly non-convergent passage closed at its outer end but communicating with the interior of the **package** and permitting said passage to receive an inserted less flexible tube about which the passage may foe **sealed**, whereby, when said weakened portion of the outer **container** is ruptured to provide an **opening**, at least the passage-containing section of the folded portion of the liner may extend therethrough and, upon **opening** the closed outer end of said passage, the contents of the **package** may be discharged therethrough, said **container** being provided with bottom and top **closures** and at least one side wall and the closed end of said liner having the said extendable portion adjacent the bottom **closures**, but the weakened portion of said **containers** is located in a side wall adjacent the bottom **closure**, whereby, when said **package** rests on said bottom **closure**, the flowable contents will discharge by gravity through said passage.



195) Family number: 23099509 (US3241897A)

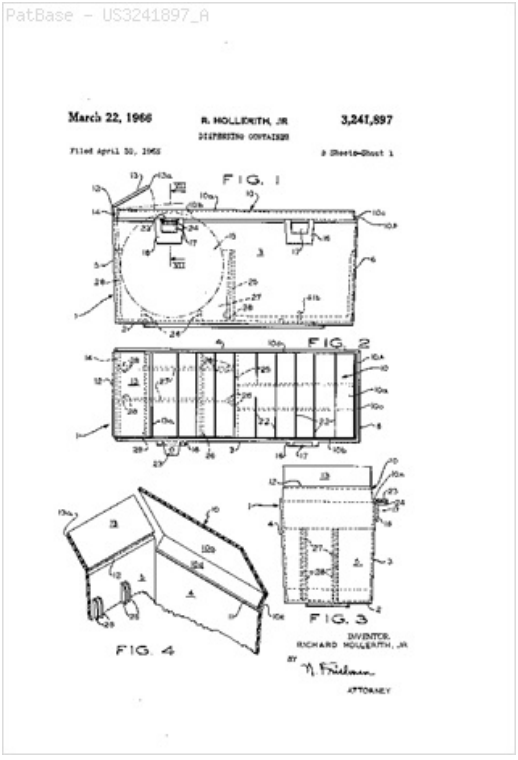
Title:	**DISPENSING CONTAINER**
Priority:	US19630276904 19630430

Family:

Publication number	Publication date	Application number	Application date
GB1043751 A	19660928	GB19640017207	19640424
US3241897 A	19660322	US19630276904	19630430

Probable Assignee:	MONROE INT
Assignee(s):(std):	MONROE CALCULATING MACHINE ; MONROE INT ; MONROE INT CORP
Assignee(s):	MONROE CALCULATING MACHINE CO
Inventor(s):(std):	HOLLERITH JR RICHARD
Inventor(s):	JR RICHARD HOLLERITH
International class (IPC 8-9):	B65D83/08 B65D85/671 (Advanced/Invention); B65D83/08 B65D85/67 (Core/Invention)
International class (IPC 1-7):	B65D85/67
CPC:	B65D83/0805 B65D85/671
European class:	B65D83/08B B65D85/671
US class:	206/409 206/459.1 312/97.1
Classification Explorer	
Cited documents:	US2647577 A, US2359871 A,
Forward Citations:	FR2491332,

Abstract:
Source: GB1043751A 1,043,751. Strip **dispensers**. MONROE CALCULATING MACHINE CO. April 24, 1964 [April 30, 1963], No. 17207/64. Heading A4G. [Also in Division B8] A **dispenser** for strip in a roll or fanfolded form comprises a **container** 1 having a slot 14 in its top wall through which the strip is withdrawn and a flap 13 hinged to the **container** adjacent the slot and movable to clamp the strip between the flap and top wall for tearing the strip along edge 13a. The **container** may be integrally moulded in plastics material with a flanged lid 10 hinged to one side with locking **tabs** 16, 17 and padlock eyes 23 on the other, and the lid may be marked for linear measurement. Internal walls 25, 5 have slots 28 which may carry linear measurement marks for the partitions 27, rolls accommodating different widths of strip rolls resting on base ribs 26 and key-hole slots in the base provided with a manual snap locking means 41b enable the **dispenser**, if for trading **stamps**, to be mounted on a cash desk. The **container** may be rectangular or cylindrical, and the flap may be curved and hinged along the edge or across the cylindrical wall. A further flap may be provided having a punch cooperating with a **container** hole for punching the strip as an aid to linear measurement.



196) Family number: 25243456 (US3385507A)

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Title: VALVED **CONTAINER** OR **BAG** AND THE LIKE

Priority: FR19650005763 19650216

Family:

Publication number	Publication date	Application number	Application date
BE676443 A	19660616		19660214
CH453191 A	19680614	CH19660001967	19660211
DE1511972 A1	19691023	DE1966C038212	19660212
DE1511972 A1	19691023	DE19661511972	19660212
DE1511972 B2	19760115	DE1966C038212	19660212
DE1511972 C3	19760826	DE1966C038212	19660212
FR1433473 A	19660401	FR19650005763	19650216
GB1090694 A	19671115	GB19660004225	19660131
NL6601774 A	19660817	NL19660001774	19660211
US3385507 A	19680528	US19660522477	19660124

Probable Assignee: CELLOPHANE SA

Assignee(s):(std)**:** CELLOPHANE SA ; LA CELLOPHANE S A PARIS

Assignee(s): LA CELLOPHANE SA ; LA CELLOPHANE S A

Inventor(s):(std)**:** CLAUDE CARRIER ; HOUILLES ; MARCEL MAUFFRE ; MAUFFRE MARCEL ; CARRIER CLAUDE

International class (IPC 8-9): B65D30/24 B65D33/24 (Advanced/Invention); B65D30/24 B65D33/16 (Core/Invention)

International class (IPC 1-7): B31B33/00 B65D31/14

CPC: B65D31/14 B65D33/24

European class: B65D31/14 B65D33/24

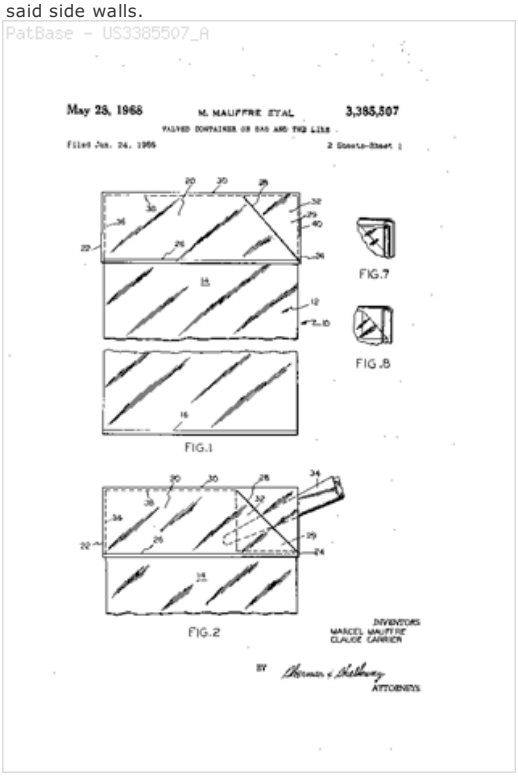
US class: 229/625 383/55 383/81

Classification Explorer

Cited documents: US3243099 A, US2959343 A, US2620944 A, US1736396 A, US1668542 A, FR1307820 A, CA545641 A,

Forward Citations: US6662829, US2003189062,

Abstract:
Source: US3385507A ABSTRACT OF THE DISCLOSURE
A plastic **bag** or **container** which is easy to use, solid and in which the industrial operation used making the ^^ same is very simple and economical, said **bag** or **container** comprising continuous side walls connected by means of a closed off bottom, a separate piece of material forming flaps folded downwardly adjacent the top of said **container** and adjacent the outer surfaces ^ of said continuous side walls, said flaps being heat **sealed** to said outer surfaces, and an **opening** means in said **container** for filling it with material. The flaps folded downwardly and adjacent the top of the **container** each may have a diagonal heat **sealed** seam therein securing each g, flap to the outer surface of each of said side walls.



197) Family number: 25080843 (US3355083A)

Title: **CONTAINER**

Priority: US19650455777 19650514 US19650482993 19650809 US19660519743 19660110 US19660548472 19660509

Family:

Publication number	Publication date	Application number	Application date
AT268992 B	19690225	AT19660004626	19660516
BE681049 A	19661114		19660513
BR6679435 A0	19730906	BR19660179435	19660512
CH464060 A	19681015	CH19660007010	19660513
DE1536204 B1	19720203	DE19661536204	19660513
DK113693 B	19690414	DK19660002470	19660513
ES326744 A1	19670701	ES19660326744	19660514
FR1434762 A	19660408	FR19650018216	19650524
FR1479873 A	19670505	FR19660061538	19660513
GB1141891 A	19690205	GB19660021426	19660513
NO120019 B	19700810	NO19660163008	19660513
US3295739 A	19670103	US19650482993	19650809
US3302846 A	19670207	US19650455777	19650514
US3355083 A	19671128	US19660548472	19660509

Probable Assignee: PHILLIPS PETROLEUM CO

Assignee(s):(std)**:** PHILLIPS PETROLEUM CO

Assignee(s): PHILLIPS PETROLEUM COMPANY ; SEALRIGHT CO INC ; SEALRIGHT CO INC A DE CORP

Inventor(s):(std)**:** ISAAC LOUNSBURY WILCOX ; LOUNSBURY WILCOX ISAAC ; WILCOX I ; WILCOX ISAAC L

Inventor(s): ISAAC LOUNSBURRY WILCOX

International class (IPC 8-9): B65D5/06 (Advanced/Invention); B65D (Subclass/Invention)

International class (IPC 1-7): B65D5/06 B65D5/10 B65D5/40 B65D5/70

CPC: B65D5/068

European class: B65D5/06D1

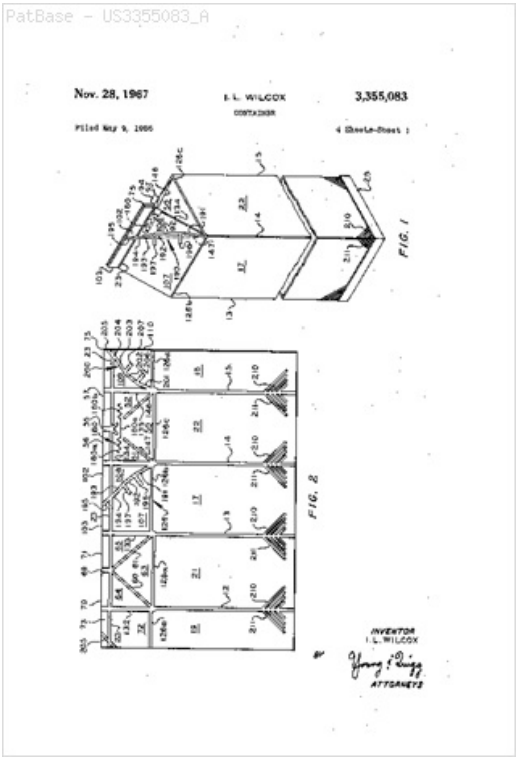
US class: 229/123.1 229/212 229/214 229/249

Classification Explorer

Cited documents: US3245603 A, US3232516 A, US3217966 A, US3204850 A, US3185376 A, US3178091 A, US3163350 A, US3120335 A, US3120333 A, US3098601 A, US3061174 A, US2687840 A, US2470199 A, US2362862 A, GB583755 A, DE1063449 B,

Forward Citations: WO8201175, WO05028319, USRE32891, US5437881, US5421512, US5366295, US5242701, US5197662, US5083702, US5080233, US4974772, US4946041, US4754917, US4730766, US4546915, US4527732, US4518377, US4211357, US3785545, US3561665, US3554430, US3520464, US3452919, US3450328, US3349988, US3348755, JP59183814, GB2253608, GB2253608, EP0010422, DE3121415,

Abstract:
Source: GB1141891A 1,141,891. Gable-top cartons. PHILLIPS PETROLEUM CO. 13 May, 1966 [14 May, 1965; 9 Aug., 1965; 10 Jan., 1966], No. 21426/66. Heading B8P. In a gable-top carton each of the ridge panels 56, 57, 70, 71 surmounting a fold-back panel 51, 52, 64, 65, has a length greater than half that of the ridge panels 102, 103; 73, 75 surmounting respectively the front roof panel 107, 108, and the rear roof panel 109, 110, 72, so that when the carton is closed folds 69, 55 either overlap or are forced together preventing leakage. A line of weakness 180 normally **covered** by a heat **sealable** tape (93), Fig. 6 (not shown), can be broken to form a spout, folds (190), Fig. 1 (not shown), (comprising parts 191... 195) and 200 being segmented to provide a snap action when acting as fulcra for forming the spout. Chevron scores 210, 211 act as stress-relievers when a loaded carton is dropped.



198) Family number: 22886456 (US3397661A)

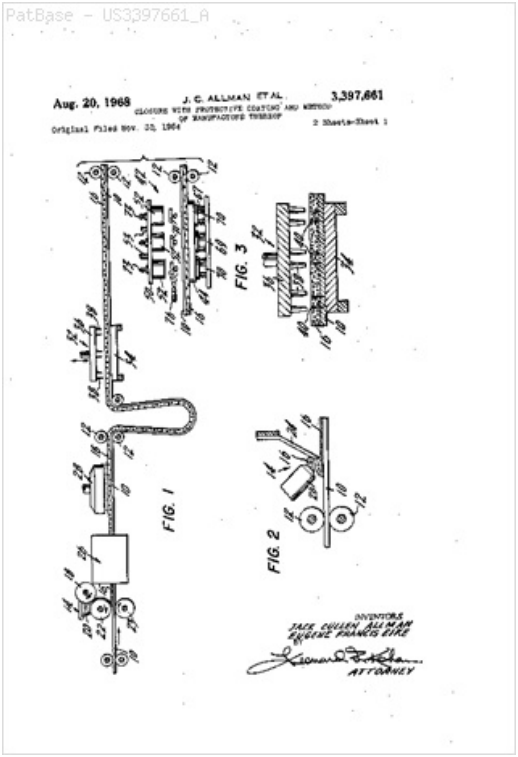
Title:	**Closure** with protective coating and method of manufacture thereof
Priority:	US19640414731 19641130 US19650487954 19650816

Family:

Publication number	Publication date	Application number	Application date
US3245568 A	19660412	US19640414731	19641130
US3397661 A	19680820	US19650487954	19650816

Probable Assignee:	AMERICAN CAN CO
Assignee(s):(std):	AMERICAN CAN CO
Assignee(s):	AMERICAN CAN COMPANY
Inventor(s):(std):	CULLEN ALLMAN JACK ; FRANCIS EIKE EUGENE ; EIKE EUGENE FRANCIS ; ALLMAN JACK CULLEN
International class (IPC 8-9):	B21D51/38 B65D41/42 B65D41/44 (Advanced/Invention); B65D41/32 (Core/Invention)
International class (IPC 1-7):	B05C9/08 B21D51/46 B65D41/42
CPC:	B21D51/383 B65D41/44 B65D41/42 B65D2101/0053
European class:	B21D51/38B B65D41/42 B65D41/44 L65D101/00A3E
US class:	113/121 215/254 215/257 215/305 413/16 413/19 D9/438
Classification Explorer	
Cited documents:	US3266659 A, US3207351 A, US3163310 A, US3163308 A, US3130056 A, US2880686 A, US2373847 A, US2199528 A,
Forward Citations:	USRE31869, US5794804, US5622745, US4556354, US4182020, US3974931, US3963140, US3958710, US3937349,

Abstract:
Source: US3397661A (Claim 1) 1. A blank for an easy-**open** end **closure** to be used on dispensin.- **containers**, said blank comprising: ge_ierally planar tearable metallic layer having a circular body portion and an integral **tab** portion extending therefrom; said metallic layer having adhered to one surface thereof, a continuous uniform coating of foamed plastisol which extends entirely across said body portion and said **tab** portion; said blank having a pair of spaced score lines coextensive with said **tab** portion and extending at least partially across said body portion; and said score lines having a depth which extends completely through said foamed plastisol coating and partially through said metallic layer to thereby define a tear strip portion in siiid blank



199) Family number: 310588 (US3393491A)

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Title: METHOD AND APPARATUS FOR STERILIZING AND FILLING BOTTLES

Priority: GB19640044485 19641030

Family:

Publication number	Publication date	Application number	Application date
DE1492421 A1	19700129	DE19651492421	19651029
DK125676 B	19730326	DK19650005571	19651029
GB1128323 A	19680925	GB19640044485	19641030
NL6511280 A	19660502	NL19650011280	19650830
SE316695 B	19691027	SE19650014013	19651029
US3393491 A	19680723	US19650481364	19650820
US3486840 A	19691230	US19680732682	19680528

Probable Assignee: NAT RES DEV

Assignee(s):(std)**:** NAT RES DEV

Assignee(s): NATIONAL RESEARCH DEV CORP ; NATIONAL RESEARCH DEVELOPMENT CORP

Inventor(s):(std)**:** PAVEY JOHN ANTHONY ; PAVEY J ; JAYNE WILLIAMS DEREK JAMES ; JAYNE WILLIAMS D ; HANSEN WILLIAM FREDERICK ; HANSEN W ; BURTON HAROLD ; BURTON H ; JAMES JAYNE WILLIAMS DEREK ; HAROLD BURTON ; FREDERICK HANSEN WILLIAM ; EMMER GREEN ; ANTHONY PAVEY JOHN

Inventor(s): WILLIAM FREDERICK HANSEN ; JOHN ANTHONY PAVEY ; DEREK JAMES JAYNE WILLIAMS ; GREEN EMMER

International class (IPC 8-9): A61L2/07 B67C3/24 B67C3/26 B67C7/00 (Advanced/Invention); A61L2/04 B67C3/02 B67C7/00 (Core/Invention)

International class (IPC 1-7): A61L1/00 A61L3/00 B67C3/10 B67C3/26 B67C7/00 F04B13/00

CPC: Y10T137/8803 A61L2/07 B67C3/24 B67C3/2614 B67C7/0073 B67C2003/2691

European class: A61L2/07 B67C3/24 B67C3/26C B67C7/00C L67C3/26U1

US class: 137/614.17 141/11 141/275 141/85 21/56 422/26 422/302 426/407 53/101 53/426 99/452 99/473

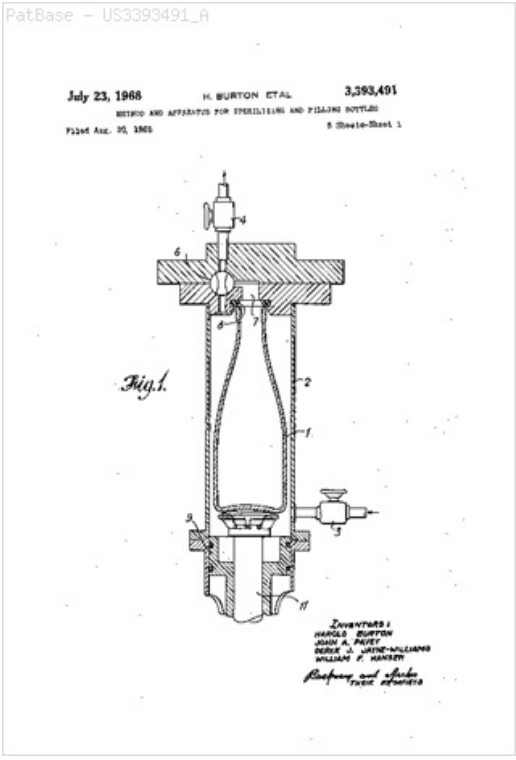
Classification Explorer

Cited documents: US626579 A, US3392034 A, US3026791 A, US2690757 A, US2660513 A, US2349780 A, US2054093 A, US1417182 A,

Forward Citations: WO13131921, WO0114241, USRE33799, US9745183, US9321620, US9296600, US8567454, US8511045, US8479782, US8356461, US8132598, US7980046, US7186374, US6742320, US6736172, US6330780, US6308748, US6280787, US6240981, US6164344, US6139806, US5900216, US5826631, US5819823, US5775387, US5758698, US5653091, US5613533, US5520101, US5499665, US5337793, US5186219, US5167266, US5163487, US5031673, US4991633, US4944333, US4622800, US4553574, US4375409, US4059113, US3780768, US3620265, US3613746, US3589093, US3570556, US3531908, US3516218, US3514919, US3481109, US2014083059, US2011072762, US2011023420, US2010050574, US2009277135, US2009205746, US2009013648, US2009013646, US2009013645, US2002159915, EP1440694, EP0334288, DE4226616, DE4207829, DE3534810, DE3119037, DE19941456, DE102016108502,

Abstract:

Source: US3393491A ABSTRACT OF THE DISCLOSURE
Sterilizing, filling and capping bottles by first preheating the exterior of a bottle while simultaneously evacuating its interior. Next the interior of the bottle is sterilized with steam and then again subjected to evacuation while the exterior is still heated so that any condensate within the bottle will boil off prior to filling. The filling device is constructed to prevent steam from coming in contact with the filling tube and its valve member during the sterilization and the device is also provided with a **seal** which will act as a safety valve if the steam pressure becomes excessive.



200) Family number: 23117996 (GB1028938A)

Title:	Improvements in or relating to urinary drainage assembly
Priority:	US19620190156 19620425

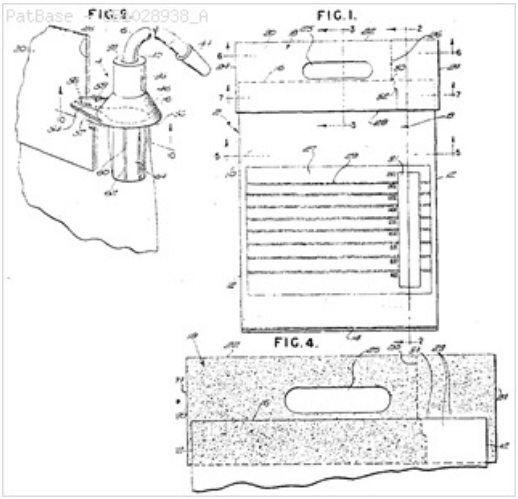
Family:

Publication number	Publication date	Application number	Application date
GB1028938 A	19660511	GB19620042242	19621108
GB1028939 A	19660511	GB19660000469	19621108

Probable Assignee:	MACBICK COMPANY
Assignee(s):(std):	MACBICK COMPANY
Assignee(s):	THE MACBICK COMPANY ; MACBICK CO
International class (IPC 8-9):	A61F5/44 A61G7/05 (Advanced/Invention); A61F5/44 A61G7/05 (Core/Invention)
International class (IPC 1-7):	A61M1/00
CPC:	A61F5/44 A61F5/4405 A61G7/0503
European class:	A61F5/44 A61F5/44E2 A61G7/05H

Classification Explorer

Abstract:
Source: GB1028938A 1,028,938. Stoppers; **bags** with tear-away **closures**. MacBICK CO. Nov. 8, 1962 [April 25, 1962], No. 42242/62. Headings B8K and B8T. [Also in Division A5] A **bag** 10 is formed by a pair of flat flexible panels joined together along the side and bottom edges, the top edges defining an **opening** and being sandwiched between a pair of stiffer panels 20 which are **sealed** to one another and to the **bag** along part of the length of the **opening**, the portions of the stiffer panels not **sealed** to the **bag** being separated from the remainder of the stiffer panels by a tear line 26 so that they can be torn away to expose an **opening** 34. The **bag** comprises flattened polyethylene tubing which is closed at one end by a **seal** 14 and at the other end is sandwiched between **closure** panels 20 of polyethylene-lined cardboard, vinyl plastic or polystyrene. The **closure** panels extend beyond the **bag** where they are heat-**sealed** together. An adapter for connecting a delivery tube to the **opening** 34 is made of polystyrene and comprises a tubular member 36 having an apertured top end wall 38 through which the tube passes, the end of the tube being spaced from the tubular member. A flange 46 between the ends of the tubular member is reinforced with radial ribs and in use seats upon the **opening** 34, a slotted extension 54 of the flange then engaging the **closure** panels. The ribs are extended downwardly longitudinally of the tubular member to form fins 60 which define overflow channels 64 thus permitting the **bag** to overflow without contaminating the tube.



201) Family number: 20790613 (US3307542A)

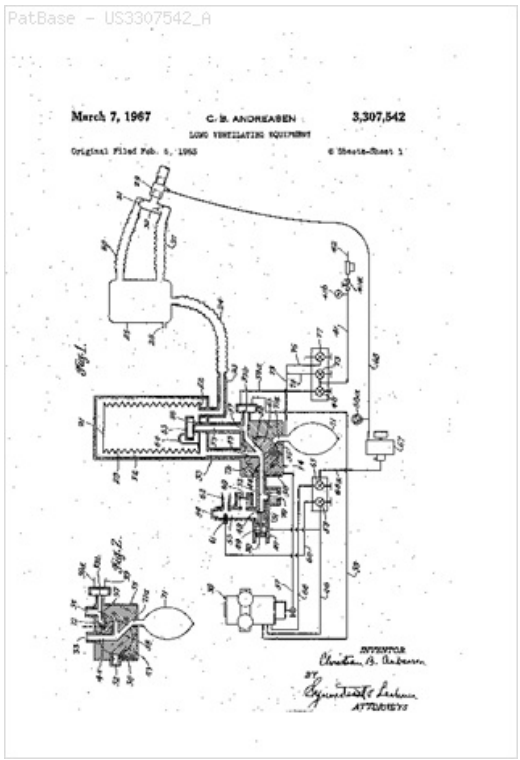
Title:	LUNG VENTILATING EQUIPMENT
Priority:	US19630256277 19630205 US19650470263 19650604

Family:

Publication number	Publication date	Application number	Application date
GB1031049 A	19660525	GB19630021678	19630530
US3307542 A	19670307	US19650470263	19650604

Probable Assignee:	AIR SHIELDS
Assignee(s):(std):	AIR SHIELDS
Assignee(s):	AIR SHIELDS INC
Inventor(s):(std):	ANDREASEN CHRISTIAN B
International class (IPC 8-9):	A61M16/00 (Advanced/Invention); A61M16/00 (Core/Invention)
International class (IPC 1-7):	A61M16/00
CPC:	A61M16/0075 A61M16/0012 A61M16/0081 A61M16/00
European class:	A61M16/00 K61M16/00M10 K61M16/00M8
US class:	128/204.25 128/204.28 128/205.15
Classification Explorer	
Cited documents:	US3156238 A, US3114365 A, US3046979 A, US3045668 A, US2880719 A,
Forward Citations:	US6701915, US6250302, US5979443, US5497767, US5111809, US4702242, US4502481, US4401116, US4197843, US4169465, US4096858, US3951137, US3844280, US3840006, US3831595, US3739775, US3556095, US3468307, US3434471, EP0621049, EP0166305, EP0166305, CN104307056,

Abstract:
Source: GB1031049A 1,031,049. Artificial respiration apparatus. AIR-SHIELDS Inc. May 30,1963 [Feb. 5, 1963], No. 21678/63. Heading A5T. Artificial respiration apparatus comprises a collapsible reservoir 20 for connection with the lungs, the reservoir being alternately collapsed and expanded by the supply of compressed gas to a chamber 32 surrounding the reservoir and a control device 38 which establishes the cycle of operation of the compressed gas and includes a valve 138 (Fig. 9 not shown) for separately and independently adjusting the expiratory phase of the equipment. Air or oxygen and if desired an anaesthetic gas is supplied to the patient through a supply and absorber **unit** 25 connected by inhalation and exhalation tubes 27, 28 to a mask or tracheal tube. A breathing **bag** 20 connected in the patient circuit is alternately collapsed and expanded to induce inspiration and expiration by the supply of gas to and withdrawal of gas from a transparent chamber 32 surrounding the **bag** 20. The chamber 32 receives gas from a source 42 through a valve 40, the controlling chamber of a normally closed dump valve 39b, a controller 38, ducts 37, 38 and a valve 35. When the controller causes the gas supply to the chamber to cease to permit expansion of the **bag** in the expiratory phase, gas under pressure is supplied through the controller to a chamber 49 to cause **opening** of a dump valve 48 so that gas in the chamber is vented to atmosphere via the valve 35, valve 48, an outlet duct 53 and a flap valve 54. During the expiratory phase a negative pressure may be developed in the chamber 32 by the passage of operating gas from a nozzle 61 through a venturi 62 which communicates with the outlet duct 53. Relief valves 69, 70 are associated with the outlet duct and the operating gas supply, respectively. A diaphragm valve 56 between the breathing **bag** and the operating gas supply has a control chamber communicating with the chamber surrounding the **bag** so that when the pressure in the **bag** exceeds that in the chamber during expiration, breathing gas is vented into the operating gas circuit and thence to atmosphere through the dump valve 48 and the flap valve 54. In the event that the operating gas supply fails so that the dump valve 48 remains closed, the dump valve 39b **opens** so that the **bag** can be vented to atmosphere. A tube 29 connecting the patients breathing mask or tube to the breathing circuit is connected via a control device 67 and ducts 66a, 66 to the controller 38 so that in the event that pressure in the tube 29 is reduced due to an inspiratory effort by the patient the controller is switched over to inspiratory operation. The apparatus may attenuatively be operated manually by a **bag** 71 to which air or other gases may be supplied, the breathing **bag** being vented during expiration through the valve 56 and an axial passage 72 in the valve 35 which is set to cut out the automatic operating circuit.



202) Family number: 22553729 (US3253593A)

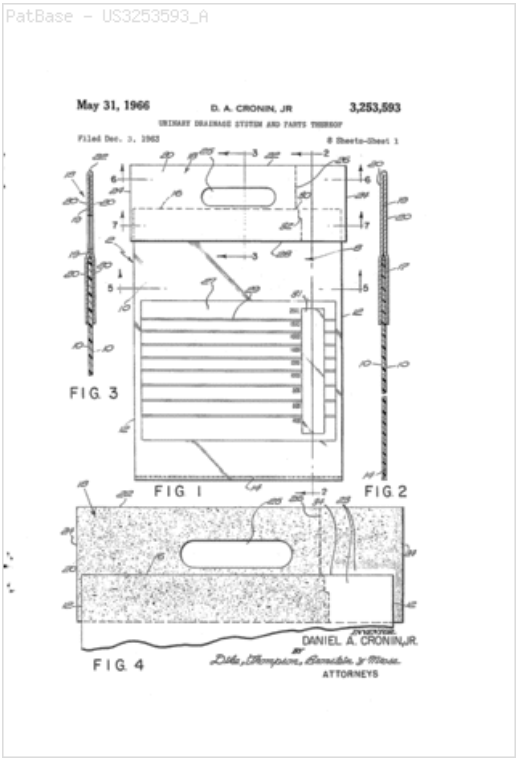
Title:	URINARY DRAINAGE SYSTEM AND PARTS THEREOF
Priority:	US19630328789 19631203

Family:

Publication number	Publication date	Application number	Application date
US3253593 A	19660531	US19630328789	19631203

Probable Assignee:	MACBICK CO
Assignee(s):(std):	MACBICK CO ; MACBICK COMPANY
Assignee(s):	THE MACBICK COMPANY
Inventor(s):(std):	CRONIN JR DANIEL A
Inventor(s):	JR DANIEL A CRONIN
International class (IPC 8-9):	A61F5/44 (Advanced/Invention); A61F5/44 (Core/Invention)
International class (IPC 1-7):	A61F5/44 A61M1/00
CPC:	Y10S383/904 A61F5/44
European class:	A61F5/44
US class:	141/285 248/95 383/29 383/904 604/324 604/325 D24/118
Classification Explorer	
Cited documents:	US551973 A, US3090968 A, US3014638 A, US2959386 A, US2900979 A, US2856932 A, US2701680 A, US2620944 A, US2111031 A, US2058118 A, US1487824 A, FR1129010 A,
Forward Citations:	US9855163, US9550919, US9463110, US9456920, US8979369, US8926577, US8777912, US8663181, US8597266, US6701571, US5088667, US5033868, US4254771, US4219177, US3900059, US3815810, US3661153, US3401696, US3371897, US3357429, US3345023, US2012197228, US2011087183, US2010280489, US2010222754, US2009274399, US2009227971, US2009216206, US2006226304, EP2311414,

Abstract:
Source: US3253593A (Claim 1) 1. A disposable drainage **bag** comprising (1) a flat, flexible synthetic plastic **bag** having a pair of flat parallel side panels joined at the bottom and side ed.-es thereof and (2) **closure** means for said **bag** comprising a pair of flat parallel **closure** panels of a material which is substantially stiffer than said flexible plastic **bag** and between which the upper edges of said **bag** panels and the portions of said **bag** panels adjacent said upper edges are sandwiched, said **closure** panels being **sealed** together and to the **bag** panels sandwiched therebetween along a portion of the width of said **closure** panels and **bag** panels but being unsealed to the **bag** panels along the remaining portion of their width, said portions of the widths of said **bag** panels sandwiched between said **closure** panels and **sealed** to said **closure** panels being also **sealed** to each other, said portions of said widths of said **bag** panels unsealed to the **closure** panels being unsealed to each other at least the portions of said **closure** panels, which are unsealed to said **bag** panels, extending upwardly beyond the unsealed upper edges of said **bag** panels, said upwardly extending portions of said **closure** panels bein.- joined together to enclose said unsealed upper edges of said **bag** panels, means on said **closure** panels to facilitate tearing the portions of said **closure** panels unsealed to said **bag** panels from the portions **sealed** to said **bag** panels to thereby expose said upper ed.-e portions of said panels which are unsealed with respect to each other.



203) Family number: 21917481 (US3256441A)

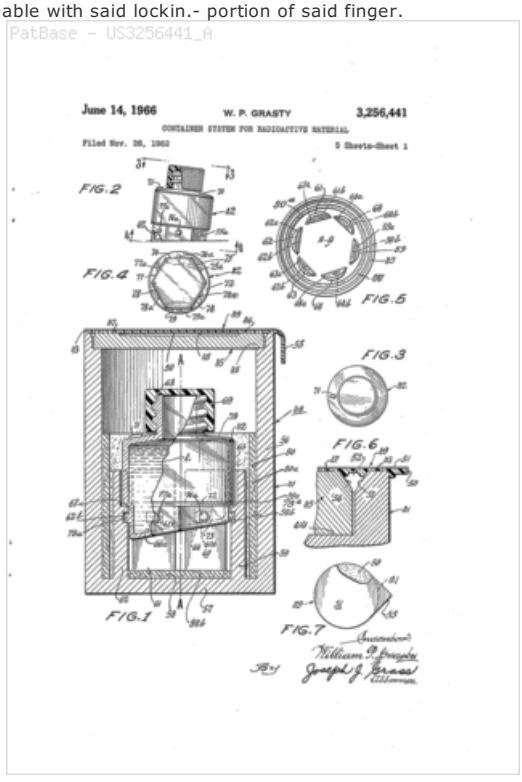
Title:	**CONTAINER** SYSTEM FOR RADIOACTIVE MATERIAL
Priority:	US19620239932 19621126

Family:

Publication number	Publication date	Application number	Application date
US3256441 A	19660614	US19620239932	19621126

Probable Assignee:	ABBOTT LABORATORIES
Assignee(s):(std):	ABBOTT LAB
Assignee(s):	ABBOTT LABORATORIES
Inventor(s):(std):	GRASTY WILLIAM P
International class (IPC 8-9):	G21F5/015 (Advanced/Invention); G21F5/00 (Core/Invention)
International class (IPC 1-7):	G01J1/42 G21F5/00
CPC:	G21F5/015
European class:	G21F5/015
US class:	206/204 206/446 220/23.89 250/506.1 976/DIG.350
Classification Explorer	
Cited documents:	US980852 A, US562896 A, US3079037 A, US2915640 A, US2837263 A, US2493891 A, US2447429 A, US190649 A, AU209361,
Forward Citations:	WO9001279, US9757306, US8633461, US8513632, US8362452, US8288744, US8221705, US8003967, US7772565, US7199375, US6989543, US6664555, US6531705, US6472675, US6323501, US6130263, US5911937, US5752603, US5704511, US5552612, US5442186, US5253761, US4923088, US4880119, US4589560, US4560069, US4382512, US4113242, US4038060, US3882315, US3815758, US3710121, US3531644, US2016030286, US2011215267, US2011215266, US2011215265, US2011215264, US2008197302, US2008185532, US2006076520, US2004047444, JP49130298, FR2369496, EP0151058, EP0023835, AU642129,

Abstract:
Source: US3256441A (Claim 1) A **container** system, comprising: an outer **container** and a **closure** therefor each composed of a radioactive shielding material, said outer **container** having a floor, at least one upstandin- flexible resieent fingerextending upwardly from said floor, said flexible resieent finger having a locking portion, and an inner **container** disposed in said _outer **container**, said inner **container** having a mating locking portion engageable with said lockin.- portion of said finger.



204) Family number: 769050 (US3397693A)

Title:	Breathing apparatus
Priority:	DE1965D046181 19650102

Family:

Publication number	Publication date	Application number	Application date
DE1261403 B	19680215	DE1965D046181	19650102
GB1136141 A	19681211	GB19660000178	19660103
NL6516560 A	19660704	NL19650016560	19651220
US3397693 A	19680820	US19650511823	19651206

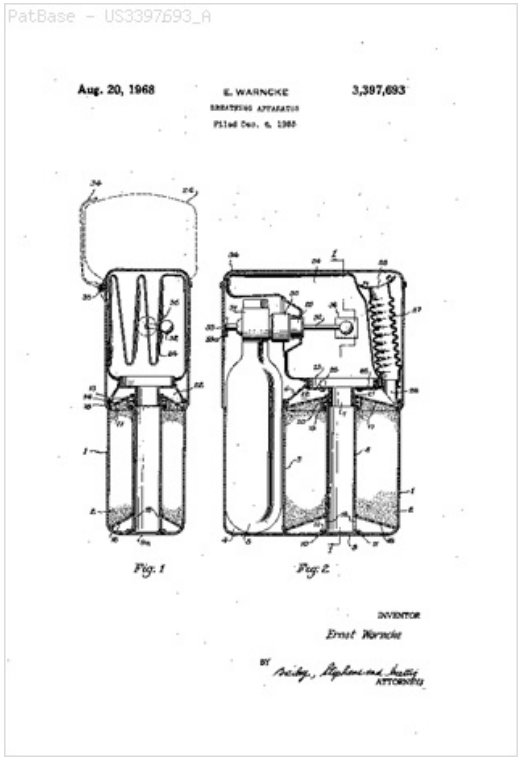
Probable Assignee:	DRAEGERWERK AG
Assignee(s):(std)**:**	DRAEGERWERK AG ; DRAGER OTTO H
Assignee(s):	OTTO HEINRICH DRAGER ; DRAEGERWERK HEINR AND BERNH DRAEGER
Inventor(s):(std)**:**	ERNST WARNCKE ; WARNCKE ERNST
International class (IPC 8-9):	A62B25/00 A62B7/00 A62B7/10 (Advanced/Invention); A62B25/00 A62B7/00 A62B7/10 (Core/Invention)
International class (IPC 1-7):	A62B7/02
CPC:	A62B7/00 A62B7/10 A62B25/00
European class:	A62B25/00 A62B7/00 A62B7/10
US class:	128/191 128/204.28

Classification Explorer

Cited documents:	US3326212 A, US3266489 A, US1628254 A, IT342699 A, GB901334 A, GB440932 A, FR1351239 A, DE1101158 A,
Forward Citations:	US4964405, US4409978, US4233971, US4154236, US4019507, US3707965, US2015190604, GB2275615, GB2275615, GB2150838, FR2453655, EP0079709, DE2901985, AT12073,

Abstract:

Source: US3397693A ABSTRACT OF THE DISCLOSURE
A compact breathing apparatus has a housing holding a gas tank, an air regenerating agent **container** adjacent the tank, and a breathing **bag** and mouthpiece tube above the **container**. When the breathing **bag** and tube are pulled i5 out of the housing, gas automatically flows into the breathing **bag** to prerinse it with oxygen.



205) Family number: 29596482 (US3345919A)

Title: CONTINUOUS **BAG** MAKING MACHINE

Priority: US19650433742 19650218

Family:

Publication number	Publication date	Application number	Application date
BE676553 A	19660718		19660216
DE1511017 A1	19690807	DE19661511017	19660217
GB1142221 A	19690205	GB19660006188	19660211
NL6602157 A	19660819	NL19660002157	19660218
US3345919 A	19671010	US19650433742	19650218

Probable Assignee: UNION CARBIDE CORP

Assignee(s):(std)**:** UNION CARBIDE CORP

Inventor(s):(std)**:** EDWARD KASTING HOWARD ; KASTING HOWARD E ; PETER SACHS JOHN ; SACHS JOHN P

International class (IPC 8-9): B29C65/00 B31B19/84 B31B37/00 B65B9/13 (Advanced/Invention); B29C65/00 B31B19/00 B31B37/00 B65B9/10 (Core/Invention)

International class (IPC 1-7): B29C24/00 B31B31/26 B31B37/26 B31B37/60 B65B9/10

CPC: B29C66/4312 B29C66/43121 B29C66/00 B65B9/13 B29C66/8322 B29C65/02 B29C66/71 B31B70/85 B31B2155/00 B31B2155/003 B31B2160/20 B29C66/1122

European class: B29C66/00 B31B19/84 B31B37/00 B65B9/13 L31B219/90J4 L31B237/20 L31B237/60

US class: 493/10 493/203 493/363

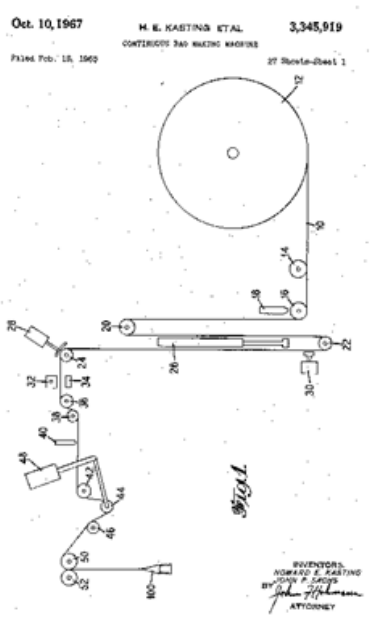
Classification Explorer

Cited documents: US3215048 A, DE1117539 B,

Forward Citations: WO13096641, US9856044, US4230030, US3908522, US3473445, US3413898, CN104053602, CN104053602,

Abstract:
Source: GB1142221A 1,142,221. Making plastics **bags** from tubing. UNION CARBIDE CORP. 11 Feb., 1966 [18 Feb., 1965], No. 6188/66. Headings B5D and B5K. [Also in Divisions B6 and B8] General arrangement.-The end portion of a supply of lay-flat tubing is held by clamps 162, 164 (Fig. 7) against an internally mounted mandrel 100, the lower portion of the tubing, previously bottomed, is cut off by knives 172, 174 which cut flaps 904, 905 (Fig. 3) on both cut ends, and the remaining end length of tubing together with the mandrel 100, is then turned about a horizontal axis to a position in which a heat **sealing** device can weld a bottom which has been formed on the tubing during the rotation. The mandrel and clamps, together with the bottomed tube, are then restored to their initial position and the tubing is fed through a **bag** length ready for a further cutting operation. Each bottomed blank cut from the tubing is gripped by clamps 182, 184 which rotate in steps of 90 degrees with a table 60 (Fig. 2) through stations F, G, H, J (Fig. 3) where a valved bottom is formed at the top of the blank. In the construction described the mandrel 1, clamps 162, 164 and the knives 172, 174, are duplicated, each with its own **bag**-tubing supply, so that bottomed blanks are fed to the table 60 at each of two stations I, II, the table 60 making two steps of 90 degrees for each blank-making cycle in stations I, and II. The **bag** may be multi-ply. Folding block-bottoms (1).-The mandrel 100 (Fig. 7) has at its lower end a pair of hinged leaves (114) (Fig. 31, not shown) which can be **opened** by pivoted magnets 166 (Fig. 7) to spread **open** side flaps at the end of the tubing, thus automatically folding in end **tabs**. Air nozzles on the clamp 162, 164 help to hold the flaps in position. As the tubing and mandrel are subsequently rotated through 180 degrees about a horizontal axis, the side flaps are folded over the leaves (114) by folding members (154) (Figs. 10 and 11, not shown). One of the folding members preferably operates during the first 90 degrees of rotation, and the other during the second 90 degrees of rotation to ensure that the flaps are folded in succession. The flaps are then welded by a device (600) (Fig. 11). Construction of mandrel.-The mandrel 100 is supported within the tubing by rollers 102, 104, 106 mounted outside the tubing and engaging rollers (129) (Fig. 31, not shown) on the mandrel. Further external rollers engage rollers (128) (Fig. 31, not shown) on the mandrel. Spring-biased pivoted shoes (126) centre the tubing on the mandrel. Hinged portions (115) on the mandrel permit the use of wider tubing. Formation of a vacuum inside the tubing on the mandrel is prevented by an air-injection needle intermittently penetrating the film. Folding block-bottoms (2). Inserting valve sheets and anti-sift sheets.-After the bottomed blank gripped, by clamps 182, 184 (Fig. 7) is cut off by the knives 172, 174, the upper edges of the blank are laid down one on top of the other on the clamp by an air jet (177) (Fig. 8, not shown) carried by the knife 172, and are held in this position by suction cups in the top surface of the clamp. At station III (Fig. 3) a suction cup (302) (Fig. 36, not shown) lifts the upper flap so that it can be folded over the opposite clamp jaw 182, also provided with suction cups, by a horizontally reciprocating shuttle plate (334). The shuttle plate also feeds into position a length of valve sheeting (see G, Fig. 3) drawn from a roll (350) (Fig. 36, not shown). The valve sheet is then welded to the adjacent corner **tab** by a welding head (320) and the shuttle plate (334) is withdrawn. Towards the end of its movement a clamp (356) on the shuttle plate draws the valve sheet taut so that it can be cut by a hot wire carried on a pivoting arm (314). A silicon-rubber **covered** platen 80 (Fig. 2) is then inserted, by a slightly downwardly inclined movement over one end **tab** and under the other, so that, at station IV (Fig. 3) folding members (186) (Fig. 30, not shown) may fold the side flaps over the platen. The folding members consist of rollers, free for rotation in one direction only, and mounted so that they are pushed upwardly through apertures in the clamp jaws 182, 184 (Fig. 7) to slide inwardly over the top surface. Air-driven wiper arms and air jets ensure that one flap is folded before the other. The resulting **closure** is then welded. An anti-sift sheet may be inserted instead of the valve sheet. Delivering completed **bags**.-An air jet on the platen 80 (Fig. 2) enclosed in the top **closure** helps to free the **bag** from the platen so that it can be delivered by suction cups (802) (Fig. 41, not shown) to a delivery conveyer. Welding heads.-Each welding head for the **bag**-bottoms includes raised portions (420), (404) and c. (Fig. 40, not shown) producing the required pattern (Fig. 33, not shown) on the end **closure**. The head is electrically heated and moves through a slot in one of two clamping members (602) (Fig. 34, not shown) which may be watercooled. An air jet subsequently cools the weld. Adjusting screws (626) (Fig. 34, not shown) determine the depth of penetration of the welding head. The welds at the top of the **bag** are made by similar apparatus. Feeding **bag** tubing.-**Bag** lengths are drawn down by clamp 710 (Fig. 7) formed with jaws 704, 708 which grip the closed bottom end of the tubing. The stroke of the clamp 700 is controlled by a photo-cell 32 (Fig. 1) sensing marks on the film. The clamp 700 makes a further slight downward movement after the holding clamps 182, 184 have closed in order to stretch the film slightly. The tubing is drawn from a roll 12 (Fig. 1) under a roller 44 which provides a bight to permit the rotation of the end of the tubing (see General arrangement above). During those parts of the cycle where tension on the web is not necessary, an air cylinder 48 withdraws the roll 44 to avoid stretching the film. Film is withdrawn from the roller 12 by a cylinder 26 acting on a dancing roller 22 while a clamp 24, 28 is applied to the tubing. Edgesensing nozzles 18, 40 adjust the axial position of the roll 12 and of snubbing rollers 36, 38 to centre the film.

PatBase - US3345919_A



206) Family number: 22939864 (US3325035A)

Title: CONTAINER CLOSURES

Priority: US19630319911 19631029 US19650511206 19651202 US19660558697 19660620

Family:

Publication number	Publication date	Application number	Application date
US3261895 A	19660719	US19630319911	19631029
US3325035 A	19670613	US19660558697	19660620
US3344093 A	19670926	US19650511206	19651202

Probable Assignee: ROSEN AND STRICKMAN

Assignee(s):(std)**:** ROSEN AND STRICKMAN

Inventor(s):(std)**:** STRICKMAN SAMUEL W

International class (IPC 8-9): B29C31/04 B29C31/06 B29C44/12 B29C70/80 B65D41/04 B65D41/12 B65D53/04 C08J9/06 (Advanced/Invention); B29C31/04 B29C44/02 B29C70/00 B65D41/02 B65D41/04 B65D53/00 C08J9/00 (Core/Invention)

International class (IPC 1-7): B29C13/02 B29C3/04 B29D27/00 B65D41/04 B65D41/12 B65D53/06 B65D83/14 C08J9/06

CPC: Y10S425/809 Y10S260/37 Y10S264/13 Y10S264/60 Y10S521/908 C08J9/06 B29K2105/0002 B29K2105/04 B29L2031/565 C08J2327/06 B29C43/18 B29C31/048 B29C31/063 B29C43/34 B29C44/1271 B29C70/80 B29C2043/3433 B29C2043/3444 B29K2027/06 B29K2105/0061 B29L2031/56 B65D41/0442 B65D41/12 B65D53/04

European class: B29C31/04D4 B29C31/06B2 B29C43/18 B29C43/34 B29C44/12M B29C70/80 B65D41/04D1 B65D41/12 B65D53/04 C08J9/06 L29C43/34B L29C43/34C L29K105/00C L29K105/00G2 L29K105/04 L29K27/06 L29L31/56 L29L31/56B M08J327/06

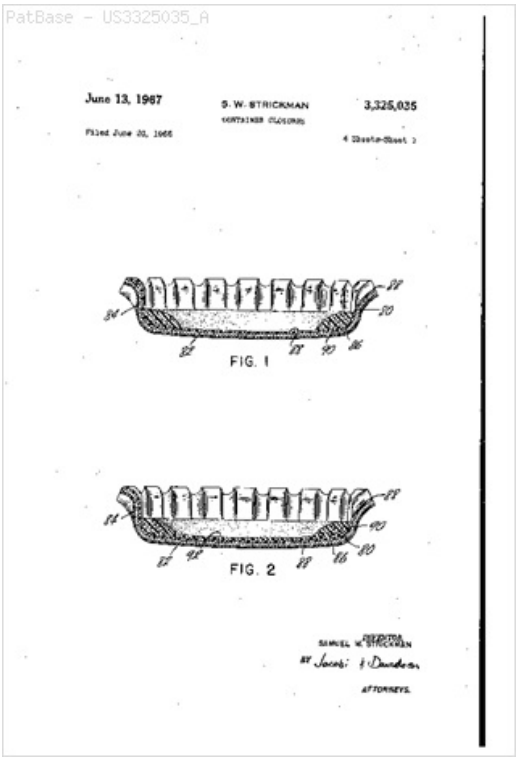
US class: 215/348 260/DIG.37 264/268 264/45.3 264/45.7 264/45.9 264/46.6 264/46.9 264/DIG.13 264/DIG.60 413/61 413/9 425/809 521/145 521/73 521/82 521/85 521/908 521/91 521/92 524/297 524/569

Classification Explorer

Cited documents: US3202307 A, US3100678 A, US3055848 A, US3037474 A, US3032826 A, US2966470 A, US2961704 A, US2904522 A, US2901446 A, US2868765 A, US2841304 A, US2834498 A, US2777164 A, US2752059 A, US2553590 A, US2548305 A, US2540040 A, US2528506 A, US2389761 A, US2326809 A, US2130746 A, US2114308 A,

Forward Citations: WO15144710, WO12145590, WO12145590, WO12120109, US9511912, US8220653, US5695083, US5372300, US4949859, US4785952, US4684426, US4650387, US4592690, US4372719, US4330353, US4295573, US4274822, US4270665, US4209101, US4036388, US3576273, US3516565, US3348717, US3339774, US2015232236, US2014183197, US2012228164, US2012091093, US2008245760, US2008110891, FR2703029, EP0091699, DE2706500, CN103502107, AU2012224574,

Abstract:
Source: US3325035A (Claim 1) 1. A container closure comprising a shell having a top panel and a peripberal skirt portion, a ring of foamed, gasket-formi,i.- material, carried by the top panel of said shell in juxtaposition to said peripheral skirt portion and a spot of unfoamed shellprotecting inaterial carried by said top panel of said shell and extending at lea_st partially between said ring of gasket-forming material and said shell.



207) Family number: 23070329 (US3422712A)

Title:	WEB APERTURING MEANS
Priority:	US19640342430 19640204 US19670661290 19670817 US19670661291 19670817

Family:

Publication number	Publication date	Application number	Application date
AU5482465 A1	19660811	AU19650054824	19650205
GB1099522 A	19680117	GB19650005003	19650204
US3347011 A	19671017	US19640342430	19640204
US3394208 A	19680723	US19670661290	19670817
US3422712 A	19690121		19670817

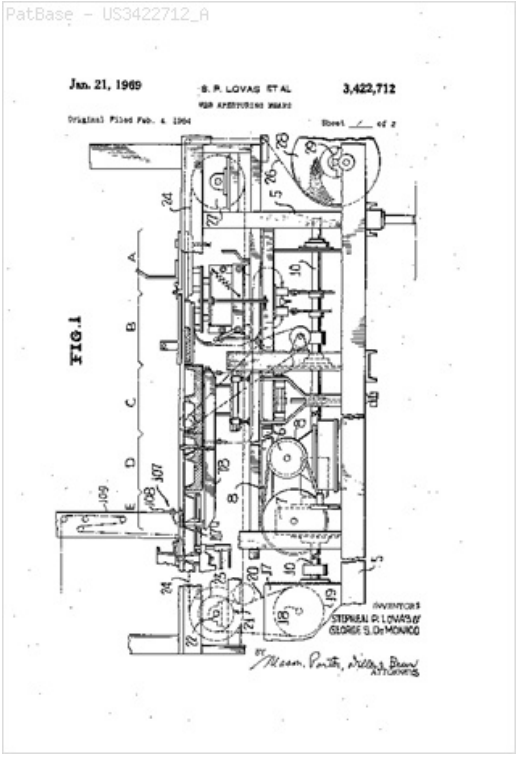
Probable Assignee:	ROYAL PACKAGING EQUIPMENT INC
Assignee(s):(std)**:**	ROYAL PACKAGE EQUIPMENT INC ; ROYAL PACKAGING EQUIPMENT INC
Inventor(s):(std)**:**	DI MONICO GEORGE S ; STEPHEN LOVAS ; MONICO GEORGE S DI ; LOVAS STEPHEN P
Inventor(s):	GEORGE SCOTTO DIMONICO AND STEPHEN PAUL LOVAS ; STEPHEN P LOVAS ; GEORGE S DI MONICO ; LOVAS STEPHEN
International class (IPC 8-9):	B26F1/02 B29C51/10 B29C51/18 B65B11/52 B65B31/02 B65B47/02 B65B47/10 B65B51/10 B65B61/00 B65B61/06 B65B9/04 (Advanced/Invention); B26F1/02 B29C51/10 B29C51/18 B65B31/02 B65B47/00 B65B61/00 (Core/Invention)
International class (IPC 1-7):	B26D7/06 B65B31/04 B65B47/10 B65B61/02 B65B9/04
CPC:	B29C51/10 B65B47/10 Y10T83/2129 B65B31/021 B29C51/18 B26F1/02 B65B61/005 Y10T83/2124 Y10T83/2213
European class:	B26F1/02 B29C51/10 B29C51/18 B65B31/02C B65B47/10 B65B61/00C
US class:	226/173 264/322 264/524 264/548 264/92 425/342.1 425/343 425/388 53/433 53/453 53/477 53/511 53/559 83/124 83/126 83/164

Classification Explorer

Cited documents:	US3346923 A, US3341893 A, US3218379 A, US3181202 A, US3081491 A, US3061984 A, US2282259 A, US2220270 A, US2220236 A, US1904268 A, US1431541 A,
Forward Citations:	WO16193006, US7490448, US7237371, US5419101, US4938001, US4835942, US4796408, US4624099, US4555894, US4398380, US4233868, US4073049, US4068448, US4055671, US4047358, US4009981, US3706174, US3597899, US3509686, US3505781, US3484518, US3481100, US3444665, US2006254218, US2006090425, JP52090381, GB2179621, GB2179621, FR2738216, FR2028765, EP0761543, DE2218395, AU612610, AU593275,

Abstract:
Source: GB1099522A 1,099,522. Making vacuum-formed **packages**. ROYAL **PACKAGING** EQUIPMENT Inc. Feb. 4, 1965, No. 5003/65. Heading B8C. [Also in Division B5] In a modified form of the machine described in Specification 1,059,729, a heat **sealable** web is fed, heated to prepare it for formation of pockets therein, the pockets being formed in clusters whose walls which intersect centrally provide contiguous pocket corners and a depressed portion at each central intersection **opening** into all pockets of the cluster; the pockets are filled; a heat **sealable** **cover** web is placed over the filled pocket clusters such that a gap is left between the depressed portion and the **cover**; the **cover** is heat **sealed** to the pocket walls except at the depressed portion; the pockets of a cluster are evacuated simultaneously through an orifice provided in the depressed portion; and the heat **sealing** is completed at each depressed portion. General operation.-As shown in Figs. 1, 1A, the bottom web 26 is gripped at its edges by clamps 25, see Fig. 18, carried on chains 24 and moved intermittently through stations A-J. At station A the web is preheated by a plate 39; at station B a preforming plate 41 further heats the web and shallow draws it by vacuum; at C a mould 76 deep draws the web by vacuum to form a cluster of four pockets including a cruciform depression 84 at the wall intersection, see Fig. 22; at D a holding mould 77, which is movable vertically reciprocably together with mould 76 at each step-motion of the web, receives the cluster and is evacuated to assure retention of the pockets' shape, the pockets then being filled by mechanical or manual means (not detailed). At E, raising of the platform 78 causes a punching sleeve 118, see Fig. 12, to rise and pierce the web at the cruciform depression 84. At this station a **cover** web 30 is also laid over the filled pockets. At a preliminary **sealing** station F, **sealing** bars 123 rise in opposition to **seal** cushions 124 to **seal** the **cover** web 30 to the tops of the wall portions of the clusters, except at the cruciform depression 84. At station G, the pockets are placed in an evacuation chamber having a bottom 168 conforming to the cluster's shape and a top 135, the bottom 168 being vertically reciprocable, see also Fig. 3. The interior of the pockets is evacuated through the orifice in the cruciform depression 84 and simultaneously the chamber is evacuated both above and below the cluster to keep the pockets' shape, and the orifice is then closed by a ring **sealer** 148 and the chamber 168, 135 vented to atmosphere, whereupon the web portions conform to the shape of the contents. Prior to **sealing** the orifice, gas may be introduced through a tube 195. At station H a cruciform heat **sealer** joins the **cover** web 30 to the cruciform depression 84 when the pockets are raised vertically; at station I, transverse cutters 214, 215 and rotary cutters 216 separate the clusters into individual **packages** which are then released by the chain clamps 25 to be delivered from the machine. Chain clamps.-As shown in Fig. 18, the clamps 25 differ principally from those of prior Specification 1,059,729 in that a slot 38 is provided in which the web margin is held by the upper jaw 35. Preheating and preforming plate.-Orifices 52 at the corners of shallow pockets 51 allow evacuation, see Fig. 6. The provision of inclined holding shoulders 61 prevents shrink-back of the web being moved to the next station when bi-axially oriented films are used. If the film is not heat shrinkable, these heater pockets are rendered inoperative by filling with metal pieces. Figs. 10, 11 and 13-15 (not shown) illustrate alternative pre-forming pockets. Forming moulds.-As also shown in Figs. 6, 22, see also Figs. 7, 8 (not shown), the vacuum is applied through corner holes 87. The cruciform depression is formed by a depressed planar portion 85 and downwardly sloping depressions 86. Chambering (90) in the mould base conducts cooling water substantially to set the vacuum formed shape. Figs. 13, 14, 16, 17 (not shown) illustrate the provision of filling blocks (103) which lie on the pocket bases whose upper surfaces have depressions according to the shape of the contents so that the pocket bases are thus pre-shaped. Orifice punching.-The orifice puncher 107, see Fig. 12, comprises a stationary plunger 114 over which a cutter sleeve 118 reciprocates, the disc thus being punched out being removed through the tube 117. Evacuation station.-See Fig. 3 and also Figs. 2, 4, 5, 19-21 (not shown). The chamber **cover** 135 includes reinforcing and pressure applying strips (138), (139). A sylphon bellows 143 serves for applying vacuum above the **cover** web 30 and around a ring **sealer** 148 which is electrically heated. An adjustable spring 164 varies the downward pressure exerted. A bore 177 carries an evacuating tube 178 recessed to carry a cushion **seal** ring 179, and also carries a gassing tube 194. Transverse severing.-As illustrated at I in Fig. 1A and also in Figs. 23-25 (not shown), the cutter 214 is higher than cutter 215 so that it cuts first when both are raised by reciprocating platform 209. This gives the transverse **seal** lines, normally bent owing to tension, time to straighten out so that distortion of the cut edges is reduced.

PatBase - US3422712_A



208) Family number: 29739403 (US3268106A)

Title:	**RESEALABLE CONTAINER CLOSURE**
Priority:	US19640338822 19640120

Family:

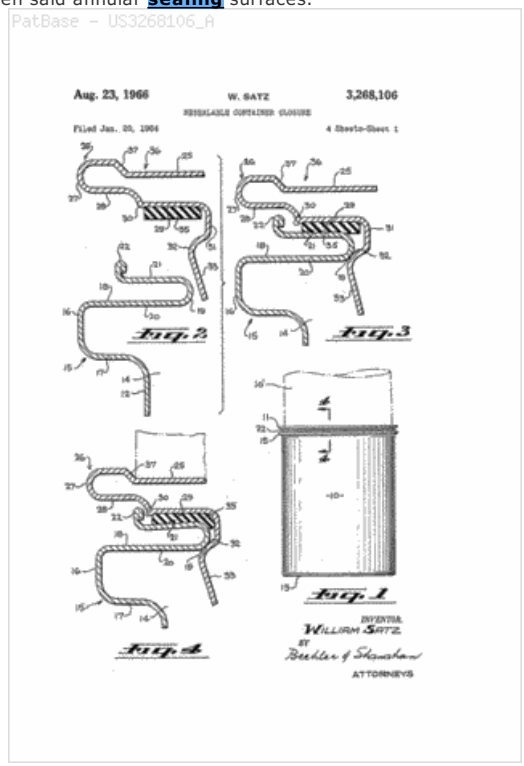
Publication number	Publication date	Application number	Application date
US3268106 A	19660823	US19640338822	19640120

Probable Assignee:	WILLIAM SATZ
Assignee(s):(std):	WILLIAM SATZ
Inventor(s):(std):	WILLIAM SATZ
Inventor(s):	SATZ WILLIAM
International class (IPC 8-9):	B65D21/02 B65D43/02 (Advanced/Invention); B65D21/02 B65D43/02 (Core/Invention)
CPC:	B65D21/0219 B65D43/021 B65D2543/00092 B65D2543/00509 B65D2543/00518 B65D2543/00537 B65D2543/00546 B65D2543/00555 B65D2543/0062 B65D2543/00629 B65D2543/00685 B65D2543/00731 B65D2543/00796 B65D2543/00898 B65D2543/00972
European class:	B65D21/02E7A B65D43/02S3D L65D543/00Y10E1 L65D543/00Y1F2C L65D543/00Y20B1 L65D543/00Y8D1C L65D543/00Y8D1E L65D543/00Y8D3 L65D543/00Y8D3N L65D543/00Y8D5 L65D543/00Y8S1B2 L65D543/00Y8S1B4 L65D543/00Y8S1D2 L65D543/00Y8S3B2 L65D543/00Y8S3D2
US class:	220/789 220/795

Classification Explorer

Cited documents:	US1887611 A, GB381483 A,
Forward Citations:	WO07065232, US8523000, US8377019, US8206364, US7870967, US7832586, US7731054, US5512030, US3372844, US3363953, US2010221393, US2009236354, US2009192479, US2009159607, US2009143755, US2008116163, US2007138046, JP5356034, JP2009518243, FR2811384,

Abstract:
Source: US3268106A (Claim 1) 1. A **sealed** **package** comprising a **container** and a **closure** therefor, said **container** comprising a peripheral wall **open** at one end, a rim on said wall at the **open** end, said rim comprising an annular substantially radially extending **sealing** surface, an annular radially inwardly convex portion adjacent the inner edge of the **sealing** surface located radially inwardly of the peripheral wall and axially inwardly of the **sealing** surfaces, and an annular outwardly facing reinforcing bead on the wall of said **container** removed from said **sealing** surface located outwardly of said **sealing** surface, said **closure** comprising a **cover** plate having an annular substantially radially extending **sealing** surface, an annular reinforcing bead on said **closure** located and facing generally outwardly relative to said last identified **sealing** surface and relative to said first identified reinforcing bead, there being a portion of said **closure** lying between the **sealing** surface and reinforcing bead of said **closure**, an intermediate portion of the **closure** at the inner edge of said last identified **sealing** surface extending in a generally axial direction toward said **container**, said intermediate portion having an annular outwardly convex camming section extending to a position underlying said inwardly convex portion and having a diameter slightly greater than said inwardly convex portion, and an annular sealing member con- fined under pressure between said annular **sealing** surfaces.



209) Family number: 25306028 (US3419401A)

© PatBase

Title: Hollow shirred meat casing stick

Priority: US19650436584 19650302 US19680810043 19680903 US19680810044 19680903 US19680810045 19680903

Family:

Publication number	Publication date	Application number	Application date
BE677007 A	19660824		19660224
BR6677333 A0	19730802	BR19660177333	19660224
DE1532029 B1	19710513	DE19661532029	19660301
GB1144073 A	19690305	GB19660008832	19660301
JP48025118 B4	19730726	JP19710053638	19710720
JP49004953 B4	19740204	JP19660011809	19660228
NL134581 C	19720215	NL19660002720	19660302
NL6602720 A	19660905	NL19660002720	19660302
SE320907 B	19700216	SE19660002672	19660301
US3419401 A	19681231	US19650436584	19650302
US3550191 A	19701229		19680903
US3564647 A	19710223		19680903
US3570045 A	19710316		19680903

Probable Assignee: UNION CARBIDE CORP

Assignee(s):(std)**:** UNION CARBIDE CORP

Assignee(s): VISKASE CORP

Inventor(s):(std)**:** ANDREW MATECKI EDWARD ; MATECKI E ; MATECKI EDWARD A

Inventor(s): EDWARD A MATECKI

International class (IPC 8-9): A22C13/00 A22C13/02 B65B9/18 (Advanced/Invention); A22C13/00 B65B9/10 (Core/Invention)

International class (IPC 1-7): A22C11/02 A22C13/00 A22C13/02

CPC: A22C13/0009 A22C13/02

European class: A22C13/00C A22C13/02

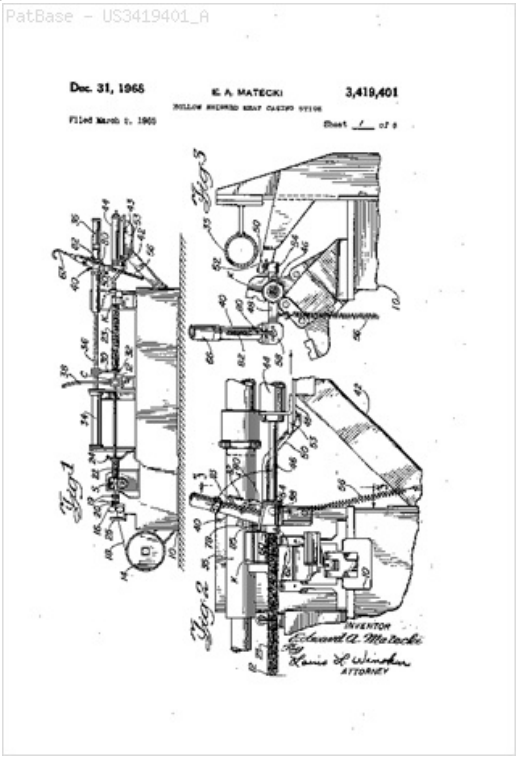
US class: 138/118.1 452/21 452/29 452/32 452/48 493/308 991/760

Classification Explorer

Cited documents: US3274005 A, US3250629 A, US3222192 A, US3162893 A, US3148992 A, US2983949 A, US2723201 A, US2181329 A, US2114077 A, DE1733234 U, DE1297508 B, DE1296543 B,

Forward Citations: WO9816114, USRE32315, US6875100, US5975301, US5897432, US5356331, US5230651, US4674153, US4660254, US4642848, US4604085, US4536175, US4525984, US4500574, US4475895, US4428402, US4411048, US4075938, US4070729, US3950821, US3914447, US3865954, US2004092221, JP53146064, FR2179915, EP0583780, DE3405445, DE3339457, DE2719717, DE2513363, DE2360480, DE2317867,

Abstract:
Source: US3419401A ABSTRACT OF THE DISCLOSURE
A hollow shirred meat casing stick is closed at one end 'by a portion of the casing material which is inturned and implanted in the bore of the stick. The **closure**, while effective to block the passage of meat emulsion, has a passage which is pervious to humid air or conditioning gas to adjust the moisture content of the casing material.



210) Family number: 22561026 (GB1040867A)

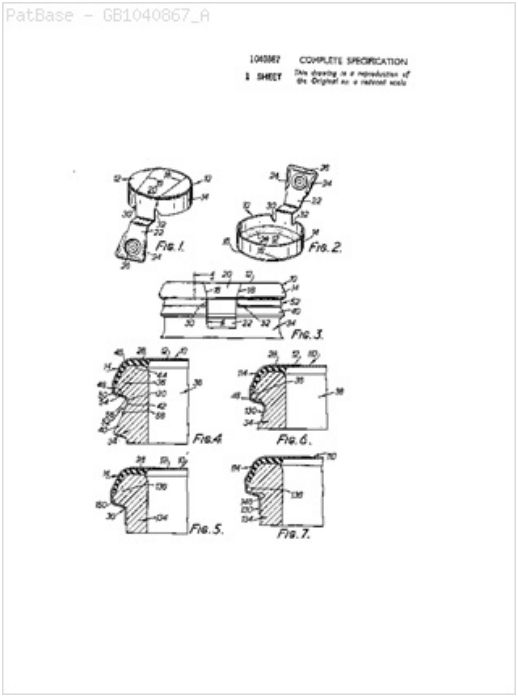
Title:	Improvements in or relating to tearable **sealing** caps or **closures** for **containers**
Priority:	GB19650033070 19650803

Family:

Publication number	Publication date	Application number	Application date
GB1040867 A	19660901	GB19650033070	19650803

Probable Assignee:	AMERICAN CAN CO
Assignee(s):(std):	AMERICAN CAN CO
Assignee(s):	AMERICAN CAN COMPANY
International class (IPC 8-9):	B65D41/42 (Advanced/Invention); B65D41/32 (Core/Invention)
International class (IPC 1-7):	B65D41/40
CPC:	B65D41/42 B65D2101/0053
European class:	B65D41/42 L65D101/00A3E
Classification Explorer	
Forward Citations:	US3731832, FR2085859,

Abstract:
Source: GB1040867A 1,040,867. **Closure** caps. AMERICAN CAN CO. Aug. 3, 1965, No. 33070/65. Heading B8T. A metallic **closure** cap for a lipped **container**, comprising a crown 12 and depending skirt 14, has a removable portion 20 defined by a pair of score lines 16, 18 extending from the skirt across the crown, a pull **tab** 22 being formed integrally with the removable portion. On applying the cap, which is provided with a **sealing** insert 28 (Fig. 2, not shown), the skirt 14 engages the lip 36 (Fig. 4, not shown) of the **container**, one or more notches 30, 32 being provided on the skirt so as to prevent fracturing of the score lines or interference between the pull **tab** and the adjacent portions of the skirt, during application of the cap. The notches 30, 32 may be as shown, or elsewhere on the skirt.



211) Family number: 22356949 (US3289891A)

Title:	Food **containers** for manned space ships
Priority:	US19620235668 19621106 US19650485433 19650907

Family:

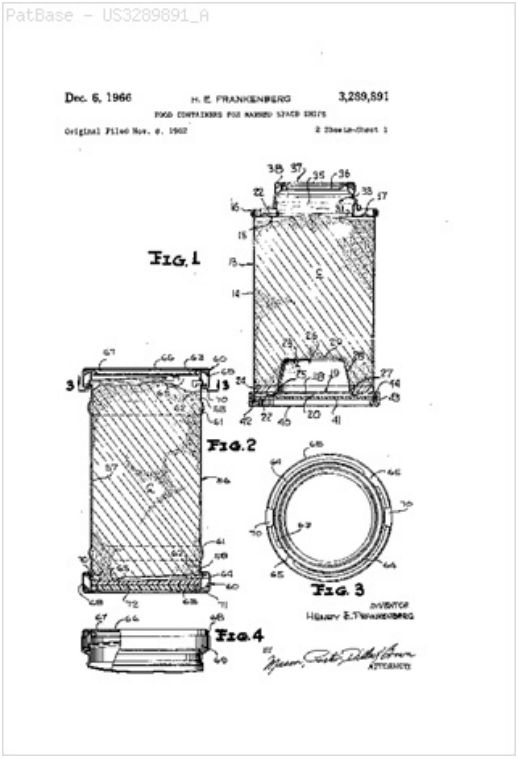
Publication number	Publication date	Application number	Application date
US3273760 A	19660920	US19620235668	19621106
US3289891 A	19661206	US19650485433	19650907

Probable Assignee:	CONTINENTAL CAN CO
Assignee(s):(std):	CONTINENTAL CAN CO
Assignee(s):	CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC
Inventor(s):(std):	FRANKENBERG HENRY E
International class (IPC 8-9):	B65D1/02 B65D41/04 B65D83/00 (Advanced/Invention); B65D1/02 B65D41/04 B65D83/00 (Core/Invention)
International class (IPC 1-7):	B65D17/02
CPC:	B65D1/0292 B65D41/0442 B65D83/0005
European class:	B65D1/02D3 B65D41/04D1 B65D83/00A
US class:	220/288 220/301 222/386 222/386.5 222/568 222/570 222/92 222/95 426/115 63/29.1

Classification Explorer

Cited documents:	US3143429 A, US3135418 A, US3037497 A, US2954144 A, US2913140 A, US2887253 A, US2842167 A, US2753088 A, US2684791 A, US2628743 A, US2318928 A, US2236727 A, US2131487 A, US2125259 A, US2125258 A, US2111582 A, US2090111 A, US1964623 A, US1761650 A, US1741326 A, US1677603 A, US1595889 A, US1484331 A, US1474118 A, US1235550 A, DE312141 A,
Forward Citations:	WO9634803, WO14039428, WO03043906, USD652722, US9771544, US9481854, US9410111, US9399752, US9296980, US9243214, US9181515, US9175248, US9169456, US8980813, US8529974, US8143206, US8143205, US6648181, US6419129, US6343713, US6261611, US6112926, US5913342, US5813577, US5494193, US5322177, US5305923, US5052576, US4907724, US4830793, US4752018, US4566612, US4432473, US4205676, US3951310, US3727802, US3486665, US3432027, US2017318992, US2014131394, US2014127362, US2011259845, US2011223299, US2011174814, US2009110786, US2008038414, US2006128294, US2004007579, DE2923103,

Abstract:
Source: US3289891A (Claim 1) 1. A **container** comprising a body having opposite end portions, a **closure** at each of said end portions, one of said end portions terminating in an inwardly directed reinforced peripheral edge, an expelling plate normally housed in said body adjacent said one end portion, said expelling plate an_d body being substantially circular in cross-section, said expelling plate including an enlarged portion and a reduced portion, said reduced portion bein.telescopically received within said reinforced peripheral edge and said enlarged portion including a peripheral portion in overlying relationship to said reinforced peripheral edge.



212) Family number: 23033126 (US3279331A)

Title:	Process in the manufacture of flexible **containers**
Priority:	AU19630032776 19630708

Family:

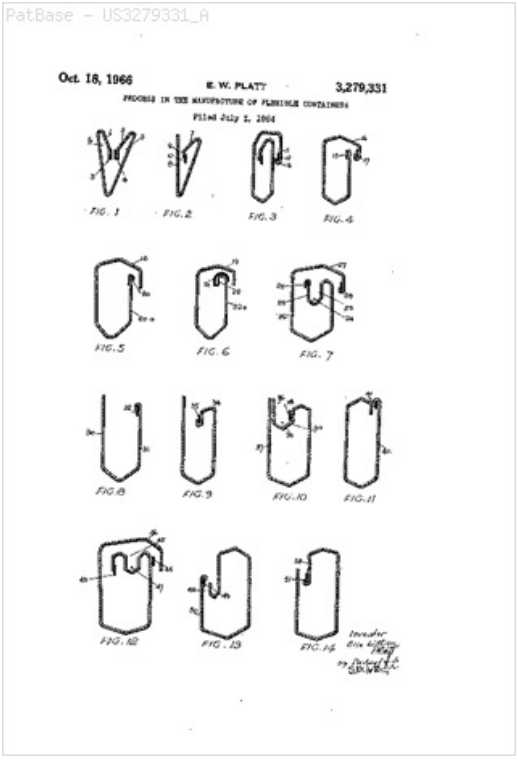
Publication number	Publication date	Application number	Application date
GB1063862 A	19670330	GB19640026970	19640630
US3279331 A	19661018	US19640379616	19640701

Probable Assignee:	ERIC WILLIAM PLATT
Assignee(s):(std):	ERIC WILLIAM PLATT ; PLATT ERIC W
Inventor(s):(std):	PLATT ERIC W
International class (IPC 8-9):	B65D33/18 B65D33/20 (Advanced/Invention); B65D33/18 (Core/Invention)
International class (IPC 1-7):	B65D31/00 B65D33/00
CPC:	B65D33/18 B65D33/20
European class:	B65D33/18 B65D33/20
US class:	383/120 383/86 383/95 4/661 493/189 493/214

Classification Explorer

Cited documents:	US3143278 A, US3079066 A, US3045891 A, US2991001 A, US2949370 A, US2793743 A, US2401109 A, US2265075 A, US2116571 A,
Forward Citations:	WO13064471, WO11136643, US7270237, US6048098, US5988879, US5832145, US5791783, US5788377, US5783012, US5575747, US5564834, US5527112, US5388699, US5205649, US5044772, US5040903, US4920586, US4793486, US4742582, US4691368, US4667453, US4633508, US4519095, US3738566, US2016288960, US2015125099, US2004238088, NL1037871, LU90952, GB2184997, GB2138379, FR2976563, FR2713204, EP2974976, EP2738113, EP2383194, EP1394060, EP0032006, EP0032006,

Abstract:
Source: GB1063862A 1,063,862. Making plastics **bags**. E. W. PLATT. June 30, 1964 [July 8, 1963], No. 26970/64. Heading B5D. [Also in Division B8] A line of **bags** formed by transversely **sealing** at (7)... (11) (Fig. 3, not shown) a longitudinally folded thermoplastic web, are closed by an adhesive strip 2 (Fig. 7) secured to an inturned margin 19, and permitting the **bags** to be **opened** and re-**sealed**. A further pocket 18 may be closed by a flap 17 secured to the **bag** wall 14 by,a strip 12 having adhesive on both sides. The pocket 18 may be omitted. A line of weakness down the centre of each transverse heat **seal** (8)... (11) (Fig. 3, not shown) may permit the **bags** to be separated. The line of **bags** may be rolled in a **dispenser** provided with a sharp edge for separating the **bags**.



213) Family number: 20890560 (US3389645A)

Title:	APPARATUS AND METHOD FOR FOLDING AND **SEALING** CARTONS
Priority:	US19650457893 19650419

Family:

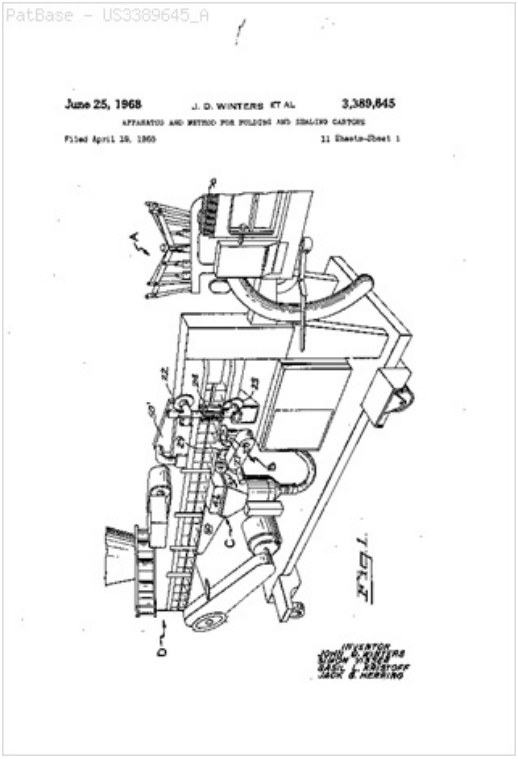
Publication number	Publication date	Application number	Application date
BE679663 A	19661018		19660418
DE1511583 A1	19690814	DE19661511583	19660407
FR1476376 A	19670407		00000000
GB1079150 A	19670816	GB19660011240	19660315
US3389645 A	19680625	US19650457893	19650419

Probable Assignee:	FIBREBOARD CORP
Assignee(s):(std)**:**	FIBREBOARD CORP ; FIBREBOARD PAPER PRODUCTS CORP
Inventor(s):(std)**:**	HERRING JACK G ; KRISTOFF BASIL L ; VISSER SIMON ; WINTERS JOHN D ; SIMON VISSER ; LEONARD BRASIL ; GERALD HERRING JACK ; DONALD WINTERS JOHN
International class (IPC 8-9):	B31B5/74 B65B51/20 B65B7/20 (Advanced/Invention); B65B7/16 (Core/Invention)
International class (IPC 1-7):	B31B3/26 B65B51/20 B65B7/20
CPC:	B65B7/20 B65B51/20 B31B50/0044 B31B50/60 B31B50/784 B31B2100/00 B31B2120/30
European class:	B31B1/60 B65B51/20 B65B7/20 L31B201/28A2 L31B201/29B L31B201/60 L31B203/00A
US class:	493/134 493/163 493/183 53/376.7 93/44

Classification Explorer

Cited documents:	US3302365 A, US3269092 A, US3084489 A, US2931277 A, US2783693 A, US2669167 A, US2425062 A, US2318208 A, US2192950 A,
Forward Citations:	WO04076282, WO04076282, US8453696, US5716314, US5170608, US5092467, US5042233, US4471601, US3713952, US3451194, EP2551090, EP2551090, EP1361160, EP0561611,

Abstract:
Source: US3389645A ABSTRACT OF THE DISCLOSURE
Apparatus for progressively folding and **sealing** adhesively treated flaps of a carton including a conveyor for moving the cartons in a line of flight, folding means including spinning fingers and wobble bars for folding the flaps into superimposed positions and a flap **sealer** including an end edge contact device for guiding the carton flaps and a heated fluid discharge means which extends across the support.



214) Family number: 21988764 (US3281007A)

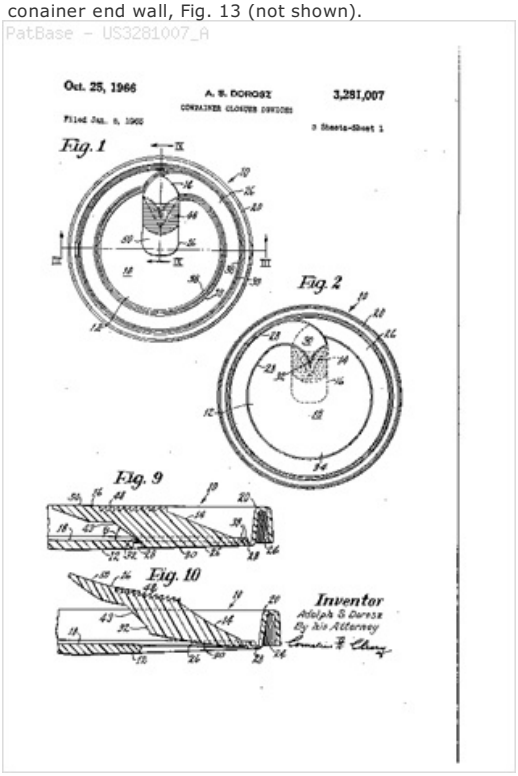
Title:	CONTAINER CLOSURE DEVICES
Priority:	US19650424352 19650108

Family:

Publication number	Publication date	Application number	Application date
FR1465829 A	19670113	FR19660045177	19660107
GB1136929 A	19681218	GB19650055002	19651228
SE308995 B	19690303	SE19660000123D	19660104
US3281007 A	19661025	US19650424352	19650108

Probable Assignee:	UNITED SHOE MACHINERY CORP
Assignee(s):(std):	BRITISH UNITED SHOE MACHINERY ; UNITED SHOE MACHINERY CORP
Assignee(s):	BRITISH UNITED SHOE MACHINERY CO LTD
Inventor(s):(std):	DOROSZ ADOLPH S ; DOROSZ A
International class (IPC 1-7):	B65D17/16 B65D17/24
CPC:	B65D17/462 B65D17/4011 B65D17/4012
European class:	B65D17/16B1 B65D17/16B2 B65D17/20
US class:	220/270 D9/438
Classification Explorer	
Cited documents:	US3163317 A, US3159303 A,
Forward Citations:	US6360909, US5133473, US5121851, US5033712, US4830214, US4702387, US4434908, US4394919, US4245760, US3981412, US3499572, US3491907, US3415412, US3400852, US2008277918, GB2254594, GB2254594, GB2232397, GB2219413, GB2219413, FR2648113, FR2639854, FR2627161, FR2551423, FR2464890, FR2433462, FR2323587, EP0375483, EP0126575, EP0126575,

Abstract:
Source: GB1136929A 1,136,929. Opening containers. BRITISH UNITED SHOE MACHINERY CO. Ltd. 28 Dec., 1965 [8 Jan., 1965], No. 55002/65. Heading B8D. A container has a wall 12 moulded from synthetic plastics material, in which a removable portion 26 is outlined by a score line 28, a pull tab 16 being formed integrally with, or secured to an area 30 of the portion 26 through a tear initiating means 14 having two faces (40, 42), Fig. 7 (not shown), which meet the portion 26 along the line 28. The means 14 includes a frusto-pyramidal member (14a) in which the faces (40, 42) meet at a line of intersection 43, Fig. 9. Reinforcing ribs 38 are formed adjacent the score line which may be cut partially in the upper surface of the wall 12, Fig. 4 (not shown), or wholly in the undersurface, Fig. 5 (not shown), or have a portion with opposed scores cut in both surfaces, Fig. 6 (not shown). The score line 28 has an acute angle at 32 forming a starting portion in the member 26. The removable portion 26 may be in the side wall of a cylindrical plastics container Fig. 11 (not shown); or in the side wall of a plastics container of square cross-section, Fig. 12 (not shown); or it may form a pouring opening in a conainer end wall, Fig. 13 (not shown).



215) Family number: 7162956 (US3461014A)

Title: MAGNETIC INDUCTION METHOD FOR HEAT-**SEALING** AND BONDING PREDETERMINED **SEALING** AREAS

Priority: US19640374470 19640611 US19680786294 19681223 US19710199445 19711117

Family:

Publication number	Publication date	Application number	Application date
DE1479342 B1	19700903	DE19651479342	19650609
FR1457330 A	19661104	FR19650020340	19650610
GB1100650 A	19680124	GB19650023306	19650601
US3461014 A	19690812	US19640374470	19640611
US3709775 A	19730109	US19710199445	19711117

Probable Assignee: HELLER W

Assignee(s):(std)**:** ALBERT LUTHER JAMES ; HELLER JUN WILLIAM C ; HELLER W ; JAMES ALBERT L ; WILLIAM C HELLER ; WILLIAM CHARLES HELLIS ; JAMES ALBERT LUTHER

Assignee(s): HELLER WILLIAM C JR ; HELLER W US ; HELLER WILLIAM C ; ALBERT L JAMES

Inventor(s):(std)**:** JAMES A ; LUTHER JAMES ALBERT ; JAMES ALBERT L ; JAMES ALBERT LUTHER

Inventor(s): ALBERT L JAMES ; JAMES A US

International class (IPC 8-9): B29C65/36 B31B1/64 B31B50/64 (Advanced/Invention); B29C65/34 B31B1/60 (Core/Invention)

International class (IPC 1-7): B29C24/00 B29C27/02 B29C27/04 C08F45/04 C08K1/02 C09J5/06 H05B6/36

CPC: B29C65/3668 Y10S428/90 B29C65/368 B29C65/3612 B29C66/1122 B29C66/4312 B29C66/4322 B29C66/83241 B29C66/83413 B29C66/83417 Y10T428/257 B29C66/49 B29C66/7392 B29C66/73921 B29C66/73941 B29C66/81263 B29C66/81811 B29K2995/0008 B29C66/43122 B29L2031/7166 B29C66/71 B29C66/8161 B29C66/8221 B31B50/64 B29C65/366 B29C65/4815 B29C65/5042 B29C65/5057 B29C65/5071 B29C65/5085 B29C66/72328 B29C66/0242

European class: B29C65/36 B31B1/64 L31B201/60C

US class: 156/272 156/272.4 156/273.1 156/275.1 156/275.3 156/308.4 219/604 219/769 428/329 428/900 524/431

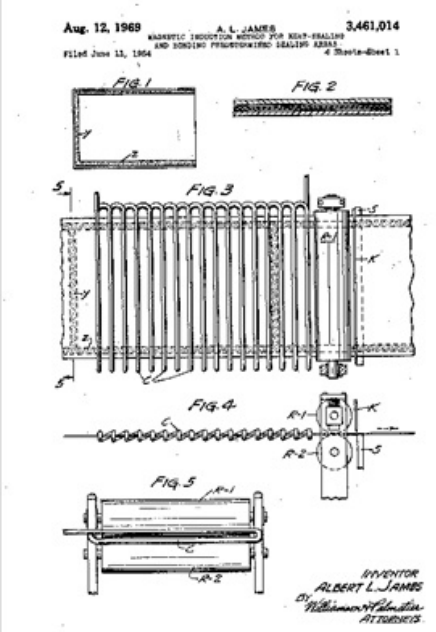
Classification Explorer

Cited documents: US3189702 A, US2777929 A, US2397471 A, US2393541 A, US2087480 A, US1813425 A, FR1197154 A, DEK12084 B, DE802282 A, DE1086426 B,

Forward Citations: WO9807800, WO9807800, WO9736965, WO15021201, WO13082101, WO13082095, WO11037732, WO06065211, USRE33467, US9770892, US9653006, US9200186, US9181462, US8927100, US8366859, US7834298, US7326897, US7211776, US7205516, US7151243, US7151243, US7084382, US7084382, US7026592, US6939477, US6930291, US6677559, US6660122, US6423953, US6312548, US6137093, US6103812, US6056844, US6023054, US5985082, US5837088, US5804801, US5798395, US5710413, US5685561, US5529708, US5481799, US5454896, US5429702, US5427846, US5416303, US5400460, US5340649, US5338497, US5319173, US5254824, US5245151, US5231267, US5208443, US5128504, US5126521, US5118370, US5087804, US4969969, US4955740, US4918754, US4906320, US4881360, US4846916, US4825625, US4817366, US4718215, US4657152, US4541883, US4461661, US4420147, US4312383, US3941641, US3925126, US3902940, US3893881, US3888715, US3864186, US3734813, US3659750, US3620876, US3620875, US2014150965, US2011094672, US2009134148, US2009127253, US2008110560, US2006269174, US2006124639, US2006124638, US2006124637, US2006124636, US2005199339, US2004099659, US2004007568, JP64078818, JP64062166, JP62050122, JP1078818, JP1062166, GB2199533, GB2199533, FR3017562, FR2725398, FR2706472, FR2515096, FR2375379, FR2375379, EP2907651, EP0705682, EP0629490, EP0629490, EP0503794, EP0171604, DE2925538, DE2653753, DE2147348, DE2147344, DE102016006320, DE102009030508, CN104114626, CN104114626,

Abstract:
Source: US3461014A ABSTRACT OF THE DISCLOSURE
A method for heat **sealing** and bonding specific predetermined **sealing** areas of two **units** of material where a heat-fusible plastic surface or particle carrying heat-fusible film is employed. A deposit of fine susceptor particles selected preferably from ferromagnetic oxides is interposed between specific predetermined **sealing** areas of the two **units** of material. Thereafter, the **units** are brought together into opposed interfacing relation with the susceptor particles contiguous to the fusible plastic surface or carrier material. The susceptor particles between the **units** are subjected to a magnetic induction field which concentrates heat effect only upon the plastic material contiguous to the particles. The **units** of material are brought together into firm contact while the said immediate contigous plastic material is in heated, fused state.

PatBase - US3461014_A



216) Family number: 29903844 (US3397622A)

Title: Bags

Priority: US19650453247 19650505 US19660587723 19661019

Family:

Publication number	Publication date	Application number	Application date
BE680587 A	19661107		19660505
DE1486980 A1	19690717	DE19661486980	19660504
GB1104809 A	19680228	GB19660018300	19660426
NL6606021 A	19661107	NL19660006021	19660504
US3291376 A	19661213	US19650453247	19650505
US3397622 A	19680820	US19660587723	19661019

Probable Assignee: BEMIS CO INC

Assignee(s):(std): BEMIS CO INC

Assignee(s): BEMIS COMPANY ; BEMIS COMPANY INC ; BEMIS CO

Inventor(s):(std): GOODWIN RALPH C ; C GOODWIN RALPH

International class (IPC 8-9): B65D30/18 (Advanced/Invention); B65D30/10 (Core/Invention)

International class (IPC 1-7): B65D31/04

CPC: B65D31/08

European class: B65D31/08

US class: 383/125 383/54 493/189 493/218 493/250 493/255

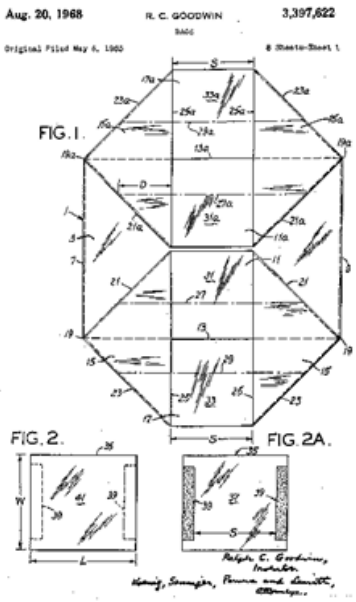
Classification Explorer

Cited documents: US3355997 A, US3343463 A, US3272093 A, US3237534 A, US3220635 A, US3195801 A, US3116002 A, US3004698 A, US2955517 A, US2660100 A,

Forward Citations: WO9502544, WO12106742, WO05030594, WO0046105, US8142077, US6643997, US6533457, US5967664, US5913764, US5845995, US5833061, US5568980, US5520464, US5518316, US5502946, US5472282, US5454207, US5356397, US5152735, US5102383, US4715635, US4637062, US4636190, US4453270, US4382538, US3514033, US3473445, US3466981, US2010008603, US2009263049, US2005069231, FR2415053, EP1149020, EP0989064, EP0010563, CN103889847, CN103889847, CN102328774,

Abstract:
Source: GB1104809A 1,104,809. Block-bottomed valve **bags**. BEMIS CO. Inc. 26 April, 1966 [5 May, 1965], No. 18300/66. Heading B8K. [Also in Division B5] **Bag**-bottom.-An insert 35 is heat-**sealed** into the bottom of a block-bottomed **bag** formed from a tube 1 of thermoplastic material. In the form shown the insert 35 underlies end flaps 15 of the bottom, being **sealed** thereto along lines 63 which also join the end flaps 15 to the underlying regions of side flaps 31, 33. Strips of heat-**seal**-inhibiting material (39), Fig. 2A (not shown), on the under-surface of the insert 35, Fig. 5, corresponding to the positions of the **seals** 63, prevent the insert 35 from adhering to the adjacent section of the opposite wall of the **bag**. Heat **sealing** is also performed along lines 65, and the flaps 31, 33 are folded in along fold lines 27, 29, to **cover** the insert 35. A heat-**seal**-inhibiting mandrel (see Division B5) may then be placed beneath the flaps 31, 33, which are heat-**sealed** together along parallel lines (79), Fig. 8 (not shown). The mandrel is then removed and further **seals** (84), parallel to the **seals** (63), complete the **bag** bottom, the heat-**seal**-inhibiting strips on the insert 35, Fig. 5, again preventing it from adhering to the adjacent wall. In an alternative construction the insert (35a), Fig. 15 (not shown), is laid on top of the end flaps (15), the heat-**seal**-inhibiting strips (39a), Fig. 16 (not shown), being provided on the inner surface of the edge of the tube (1), instead of on the insert. In a further form the insert (35b), Fig. 18 (not shown), is provided on its under-side with a strip (99) of heat-sealinhibiting material joining the two edge strips (39), thus **dispensing** with the need for a mandrel in making the **seals** (79). A further embodiment is described in which the inhibiting strips are completely **dispensed** with, all unwanted adhesion being prevented by mandrels. **Bag**-top.-The top of the **bag** may be folded similarly to the bottom, but may be provided with two inserts to form a filling valve. One insert 45, Fig. 5, underlies one end flap 15a of the tube, and is **sealed** thereto along a line 63a. A heat-**seal**-inhibiting strip (51), Fig. 3A (not shown), prevents adhesion to the underlying wall. A second inhibiting strip (49) lies along the line of a second **seal** 63a, Fig. 5, preventing the insert 45 from adhering to the edge of the end flap 15a which it overlaps. A further insert, whose edges 55a, 55b, are shown, is **sealed** along the line 63a to the under-surface of the second end flap 15a, but carries an inhibiting strip (59), Fig. 4A (not shown), to prevent adhesion to the adjacent tube wall. When the side flaps 31a, 33a have been folded over and **sealed** along lines (79a, 84a), Fig. 13 (not shown), a passage (87), Fig. 10 (not shown), is left between the inserts (45, 55), to permit insertion of a filling spout. Adhesion of the back wall of the tube to the adjacent surfaces may be prevented, as for the bottom of the **bag**, by means of a mandrel, or by the prevention of an inhibiting strip (101), Fig. 19 (not shown), joining the strips (49, 51) on the insert (45a).

PatBase - US3397622_A



217) Family number: 770710 (US3373926A)

Title:	SEAMED **CONTAINER** WITH EASY **OPENING** FEATURE
Priority:	US19650455699 19650514

Family:

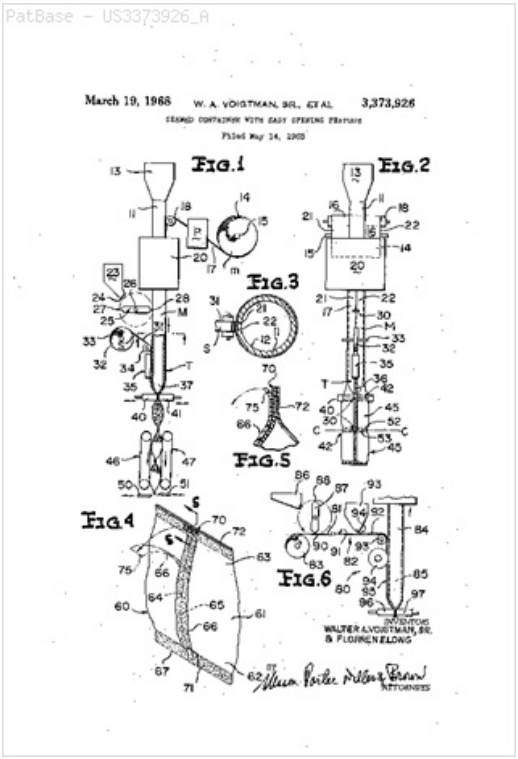
Publication number	Publication date	Application number	Application date
NL6605669 A	19661115	NL19660005669	19660427
US3373926 A	19680319	US19650455699	19650514

Probable Assignee:	CONTINENTAL CAN CO
Assignee(s):(std):	CONTINENTAL CAN CO
Assignee(s):	CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC
Inventor(s):(std):	LONG FLORREN E ; VOIGTMAN WALTER A ; VOIGTMAN WALTER A SR
International class (IPC 8-9):	B65B61/18 B65B9/20 B65B9/213 B65D75/12 B65D75/58 (Advanced/Invention); B65D75/46 (Advanced/Non-invention); B65B61/18 B65B9/10 B65D75/04 B65D75/52 (Core/Invention); B65D75/00 (Core/Non-invention)
International class (IPC 1-7):	B65B61/18 B65B9/10
CPC:	B65B9/2028 B65B9/2056 B65B9/213 B65B61/184 B65D75/12 B65D75/46 B65D75/5838
European class:	B65B61/18C B65B9/20M4 B65B9/213 B65D75/12 B65D75/58E1A
US class:	229/66 383/205 383/211 383/66 53/133.3

Classification Explorer

Cited documents:	US3311033 A, US3179327 A, US3147674 A, US3140815 A, US3126796 A, US3101885 A, US2365651 A, GB625351 A,
Forward Citations:	USD548613, US9708104, US9688442, US9663282, US9656783, US9630761, US9221590, US9205967, US9187228, US9150342, US8951591, US8889205, US8746483, US8722122, US8408792, US8308363, US8114451, US7963413, US5979653, US5826985, US5617704, US5437881, US5366295, US4874096, US3674195, US2011127319, US2011011864, US2010303391, US2010018974, US2008240627, US2008138000, US2008037911, US2007275133, NL1000185, EP0406613, EP0134130, EP0134130, EP0105578, DE19808789, DE19808789,

Abstract:
Source: US3373926A (Claim 1) 1. A readily **openable** **package** comprising a generally tubular body, said body having first and second end portions, transverse **sealing** 'means **sealing** one of said end 4' portions, means closing the other of said end portions, ;) said body having contiguous longitudinal edge por-tions extending from said first end portion toward said second end portion, a **sealing** strip overlying said edge portions, means securing a major portion of said strip to said lon- gitudinal edge portions, and means preventing said securing means frorn securing a minor **tab** portion of said strip to said one end portion whereby said **tab** portion remains free of said body and can be grasped and pulled for at least partially removing the major portion of the strip from the body incident to the removal of the **packaged** product through said bod between the longitudinal edge , y portions thereof.



218) Family number: 21938935 (US3286433A)

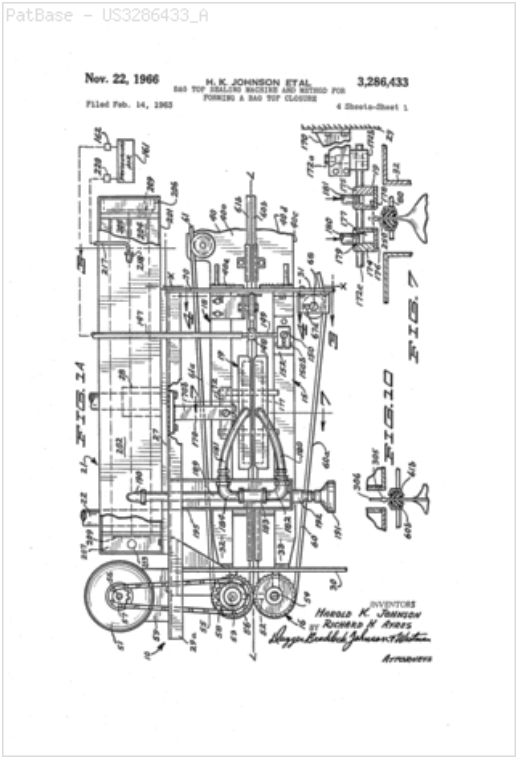
Title:	BAG TOP SEALING MACHINE AND METHOD FOR FORMING A BAG TOP CLOSURE
Priority:	US19630258446 19630214

Family:

Publication number	Publication date	Application number	Application date
US3286433 A	19661122	US19630258446	19630214

Probable Assignee:	BEMIS CO INC
Assignee(s):(std):	BEMIS CO INC
Assignee(s):	BEMIS COMPANY INC
Inventor(s):(std):	JOHNSON HAROLD K ; AYRES RICHARD H
International class (IPC 8-9):	B29C65/00 B29C65/10 B29C65/78 B65B51/24 (Advanced/Invention); B29C65/00 B29C65/10 B29C65/78 B65B51/10 (Core/Invention)
International class (IPC 1-7):	B31B31/60 B65B51/24
CPC:	B65B51/24 B29C65/10 B29C65/7873 B29C66/1122 B29C66/43121 B29C66/87441 B29C66/9121 B29C66/9141 B29C66/9161 B29C66/919 B29C66/9241 B29C66/836 B29C66/73921 B29C66/8161 B29C66/0222 B29C66/137
European class:	B29C65/10 B29C65/78M2D2 B29C66/02 B29C66/1122 B29C66/43121 B29C66/87441 B29C66/90 B65B51/24 L29C66/91 L29C66/919 L29C66/92 L29C66/929
US class:	53/167 53/373.9 53/374.4 53/479
Classification Explorer	
Cited documents:	US3018594 A, US2775683 A, US2606850 A, US2423237 A, US1217229 A,
Forward Citations:	US9358748, US9233502, US8443578, US7128935, US5987856, US5184447, US5134833, US5092104, US4272264, US3875726, US3699746, US3505136, US3432982, US2012225762, US2004168409, US2003009987, JP52030592, JP49009677, EP0825115,

Abstract:
Source: US3286433A (Claim 1) 1. A method for forming a bag top closure seal on a bag top of a heat sealable bag comprising support-ingly conveying in a given horizontal direction aheat sealable bag at its sidewalls at an elevation below the top miarginal edges -of the bag, spreading the -top marginal edge portions of the b-ag as it is being conveyed, cleaning the inter,ior surf_ace of the spread marginal edge, portions, and after cleanin- the spread marginal edge portions, directing streams of hbt air toward one another in directions transverse to the movement of the b_ag to contact t-he bag top -adjacent to its marginal edges to form a heat seal bead closure.



219) Family number: 29903848 (US3291377A)

© PatBase

Title: **PACKAGING**

Priority: US19660525532 19660207

Family:

Publication number	Publication date	Application number	Application date
BE688408 A	19670331		19661018
DE1536188 A1	19700108	DE19661536188	19661007
GB1107200 A	19680320	GB19660043743	19660930
US3291377 A	19661213	US19660525532	19660207

Probable Assignee: NAT DAIRY PROD CORP

Assignee(s):(std)**:** NAT DAIRY PROD CORP

Assignee(s): NATIONAL DAIRY PRODUCTS CORP

Inventor(s):(std)**:** MUELLER EGGEN REX ; EGGEN REX M

International class (IPC 8-9): B65D65/02 B65D65/32 B65D65/34 B65D75/08 B65D75/12 B65D75/26 B65D75/68 (Advanced/Invention); B65D65/02 B65D65/22 B65D75/04 B65D75/26 B65D75/52 (Core/Invention)

CPC: B65D65/02 B65D75/08 B65D75/12 B65D75/26 B65D75/68

European class: B65D65/02 B65D75/08 B65D75/12 B65D75/26 B65D75/68

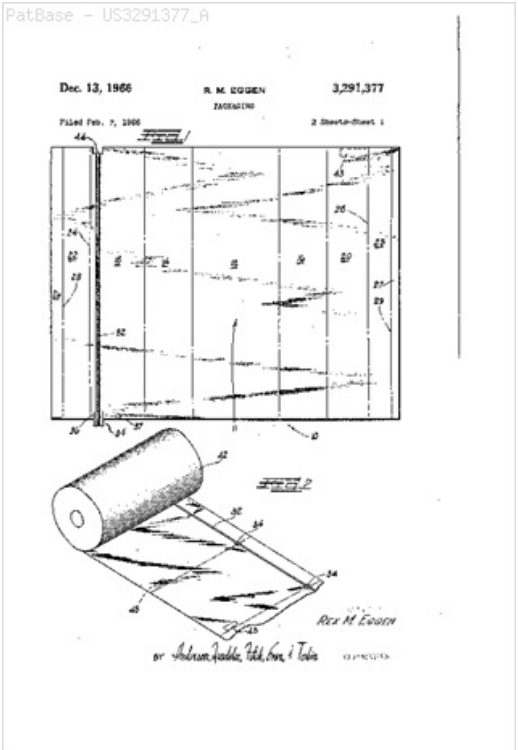
US class: 206/459.5 229/87.05 229/87.08 383/205 426/122 426/123 426/126 426/130

Classification Explorer

Cited documents: US3233815 A, US3017302 A, US2790594 A, US2725172 A, US2322654 A, US2304591 A, US2214997 A, US2055333 A, US2042073 A, GB744643 A,

Forward Citations: WO9938685, WO9603330, WO8900956, WO8300677, WO8002828, WO8002827, WO15075420, WO13114091, WO10121731, WO10084336, WO10046623, WO10046623, WO09077724, WO08110302, WO03057476, USRE33674, USD619478, US9708104, US9688442, US9663282, US9656783, US9630761, US9221590, US9205967, US9187228, US8951590, US8919553, US8650843, US8551614, US8523843, US8468782, US8356457, US8240546, US8153216, US8056209, US8051981, US7857135, US7815050, US7770726, US7621106, US6581764, US6416841, US6316036, US6213644, US6177113, US5945145, US5897052, US5826985, US5366295, US4961437, US4957521, US4934532, US4881646, US4638911, US4364478, US3800497, US3389783, US2016046400, US2014348445, US2013295242, US2012091132, US2012058231, US2011132976, US2011011864, US2010263327, US2008314787, US2008178559, US2008087567, US2008063320, US2008058749, US2008044525, US2007289887, US2007278116, US2005048307, RU2530800, GB2521821, GB2271333, GB2271333, GB2206555, GB2206555, GB2186541, GB2186541, FR2774078, FR2480713, EP2769931, EP1967463, EP1602594, EP1327516, EP1288139, EP0474981, EP0134130, EP0134130, EP0042832, EP0024271, DE3545731, DE3014405, DE102010004440, CN105745162,

Abstract:
Source: GB1107200A 1,107,200. Coated sheet material. NATIONAL DAIRY PRODUCTS CORPORATION. 30 Sept., 1966 [7 Feb., 1966], No. 43743/66. Heading B2E. [Also in Divisions B5 and B8] A wrapper for cheese c is cut from a sheet comprising an intermediate layer of a flexible, tear resistant, gas and moisture impervious synthetic film and an inner layer of a pressure **sealable** and releasable wax-like coating which does not adhere readily to the cheese c, to which an outer layer of metal foil may be added. The intermediate layer is preferably a 50 gauge film of polythene terephthalate resin, although polypropylene, polyethylene or "Cellophane" (registered Trade Mark) may be used. The inner layer is preferably a mixture of ethylene-vinyl acetate and paraffin wax forming a coating of about 25 pounds per ream, but the following may be used;-a mixture of rubber, paraffin wax and microcrystalline wax; a mixture of microcrystalline wax, aluminium distearate, and an ester gum; a mixture of 18 percent by weight pale crepe rubber, 8 percent ester gum, 44 percent microcrystalline wax, and 30 percent paraffin wax. The outer layer is preferably a 0.0004 inch thick aluminium foil to provide strength and dead fold characteristics, bonded to the intermediate layer by a film of thermoplastic bonding material such as polyethylene, and the outside surface of the foil may be coated with vinyl plastics or lacquer or other ink receptive material.



220) Family number: 23004332 (US3344974A)

Title: COMPOSITE **CONTAINER** **PACKAGE**

Priority: US19650480655 19650818

Family:

Publication number	Publication date	Application number	Application date
BE685504 A	19670116		19660812
CH459053 A	19680630	CH19660011743	19660815
DE1536101 A1	19690814	DE19661536101	19660816
DK111873 B	19681014	DK19660004238	19660818
GB1145764 A	19690319	GB19660036901	19660817
NL6611573 A	19670220	NL19660011573	19660817
NO121029 A	00000000		00000000
NO121029 B	19710104	NO19660164185	19660804
SE315846 B	19691006	SE19660011176	19660818
US3344974 A	19671003	US19650480655	19650818

Probable Assignee: ILLINOIS TOOL WORKS

Assignee(s):(std)**:** ILLINOIS TOOL WORKS ; ILLINOIS TOOL WORKS INC

Inventor(s):(std)**:** JOHN DONALD BOSTROM ; DONALD BOSTROM JOHN ; BOSTROM JOHN DONALD ; BOSTROM J

International class (IPC 8-9): B65D21/02 B65D43/02 B65D51/18 (Advanced/Invention); B65D21/02 B65D43/02 B65D51/18 (Core/Invention)

International class (IPC 1-7): B65D11/00 B65D17/16 B65D51/00 B65D81/28 B65D81/34 B65D85/72

CPC: B65D51/185 B65D43/022 B65D21/0233 B65D2251/0031 B65D2251/0081 B65D2543/00027 B65D2543/00194 B65D2543/00296 B65D2543/00509 B65D2543/00546 B65D2543/00851 E01D2101/30

European class: B65D21/02F B65D43/02S5D B65D51/18 L65D251/00Y2M L65D251/00Y6F L65D543/00Y10B4 L65D543/00Y1A L65D543/00Y1F4C3 L65D543/00Y1M6 L65D543/00Y8D1C L65D543/00Y8D3N P01D101/30

US class: 206/518 220/257.1 220/657 220/675 229/123.1 229/125.05 229/125.35 229/406 229/407 D9/425

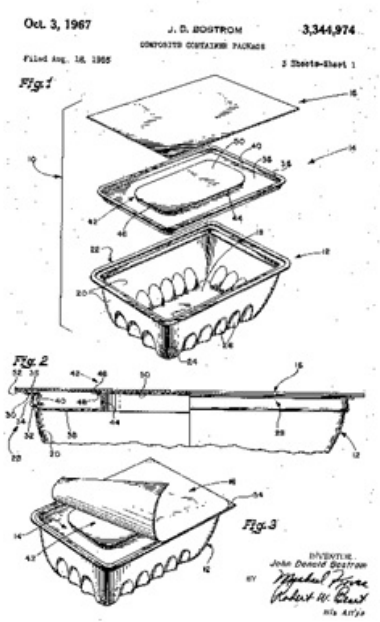
Classification Explorer

Cited documents: US3261530 A, US3207651 A, US3185578 A, US3172801 A, US3163311 A, US3154215 A, US3140807 A, US3139213 A, US3131827 A, US3064874 A, US3056492 A, US2972432 A, US2298814 A, US2130355 A, FR1231761 A,

Forward Citations: WO9300274, WO8701098, WO8400824, WO06085835, WO0013985, USD788582, USD787319, USD784127, USD778719, USD756219, USD750477, USD730725, USD726535, USD630525, USD618998, USD603697, USD602352, USD600113, USD597831, USD579767, USD553010, USD528014, USD522355, USD522319, USD516359, USD514390, USD510263, USD508819, USD503336, USD502095, USD482277, USD462901, USD444382, USD443205, USD442082, USD439160, USD435443, USD433334, USD432914, USD430023, USD420798, US9795241, US8911807, US8893883, US8523000, US8468786, US8365910, US8361418, US8158174, US8088421, US8074830, US7922021, US7731997, US7347327, US7216769, US7172779, US7051885, US6349847, US6257401, US6138899, US6068154, US5984130, US5916614, US5676276, US5447736, US5439132, US5348752, US5334405, US4990345, US4739900, US4726489, US4570818, US4429792, US4408693, US4373642, US4346833, US4340138, US4202464, US3955006, US3941301, US3884383, US3700096, US3679093, US3567067, US3561668, US3552634, US3445050, US3394861, US3391847, US3388827, US2017283129, US2012305426, US2011315567, US2011315566, US2011215024, US2011111099, US2011031153, US2011006069, US2010258569, US2010237088, US2010071567, US2010001014, US2009188831, US2009057167, US2009047394, US2008128424, US2007175897, US2007131698, US2007116805, US2007009343, US2006011626, US2005252814, US2005247708, US2005042338, US2005040068, US2004062838, GB2350353, GB2350353, GB2272877, GB2272877, GB2252963, GB2252963, GB2186860, GB2186860, GB2141095, EP1892196, EP1119495, EP0481943, DE3737052, AU2008215159, AU2008215159,

Abstract:
Source: GB1145764A 1,145,764. Food **containers**; portable **containers**. ILLINOIS TOOL WORKS Inc. 17 Aug., 1966 [18 Aug., 1965], No. 36901/66. Headings B8O B8D and B8P. A thermoplastic **container** 12, Fig. 2, for food products, has a shoulder 30 supporting a thermoplastic replaceable lid 14 having an upwardly extending skirt 40 and a knob 42, the flat upper surface of which lies substantially coplanar with at least a part of a surface 52 lying outwards of the shoulder 30. A **cover** sheet 16 is secured to the **container** 12 to hermetically **seal** the contents. The **container** 12 is strengthened by fluted sides (Fig. 1, not shown), and has a shoulder 32 positioned below the shoulder 30 to facilitate nesting of the **containers**. To facilitate removal, tear **tabs** may be provided on the **cover** sheet 16 or a corner portion (54) (Fig. 3, not shown) of the sheet may extend beyond the curved corner of the **container** 12. Alternatively, the **cover** sheet 16 may be perforated between two knobs on the lid 14, which may have a rim (56), (Fig. 8, not shown), extending inwardly from the skirt portion 40 to facilitate stacking of the lids. In another embodiment, Fig. 9, the **cover** sheet 16d is bent around a curved portion 60 on the **container** 12d. The **container** 12 and lid 14 are preferably of impact polystyrene, polyethylene or P.V.C. and the **cover** sheet 16 is preferably of thermoplastic, foil coated paper or adhesively coated treated paper or foil.

PatBase - US3344974_A



221) Family number: 22509731 (US3301465A)

Title:	EASILY **OPENABLE** **PACKAGE** AND **CLOSURE** THEREFOR
Priority:	US19650497808 19651019

Family:

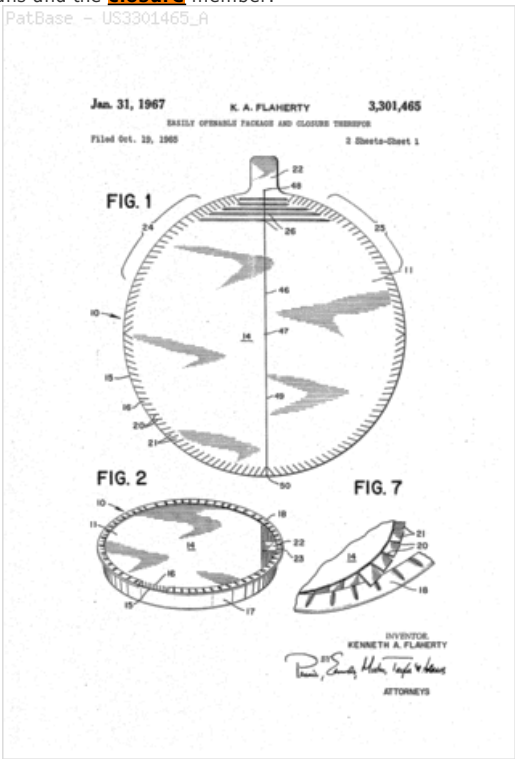
Publication number	Publication date	Application number	Application date
US3301465 A	19670131	US19650497808	19651019

Probable Assignee:	ANACONDA ALUMINUM CO
Assignee(s):(std):	ANACONDA ALUMINUM CO
Assignee(s):	ANACONDA ALUMINUM COMPANY ; ATLANTIC RICHFIELD CO ; ATLANTIC RICHFIELD CO A PA CORP
Inventor(s):(std):	FLAHERTY KENNETH A
International class (IPC 8-9):	B65D77/20 (Advanced/Invention); B65D77/10 (Core/Invention)
International class (IPC 1-7):	B65D17/16 B65D81/34
CPC:	B65D77/2008 B65D2577/205 B65D2577/2091
European class:	B65D77/20B1 L65D577/20M1 L65D577/20P2
US class:	220/620 229/123.2 229/5.82

Classification Explorer

Forward Citations: US3885731, US3516597, US3367555, US2006175223,

Abstract:
Source: US3301465A (Claim 1) 1. A **container** **closure** comprising a substantially flat **closure** member, a plurality of peripherally spaced score cuts through the **closure** member along its marginal edge and extending into the body of the **closure** member along its marginal edge portion, fringe portions defined by the marginal edge portions between the spaced cuts and extending in the same plane as the flat **closure** member, said fringe portions being separably displaceable out of the plane of the **closure** member, a **tab** means on said **closure** member for grasping the **closure**, said score cuts being cut inwardly.from the peripheral edge of the **closure** at an oblique angle to the peripheral edge at least along those peripheral portions which diverge - away from the **tab** means to define fringe portions therealong which extend in the direction away from a line connecting the center of the **closure** member and a point on the juncture of the **tab** means and the **closure** member.



222) Family number: 22825738 (US3305143A)

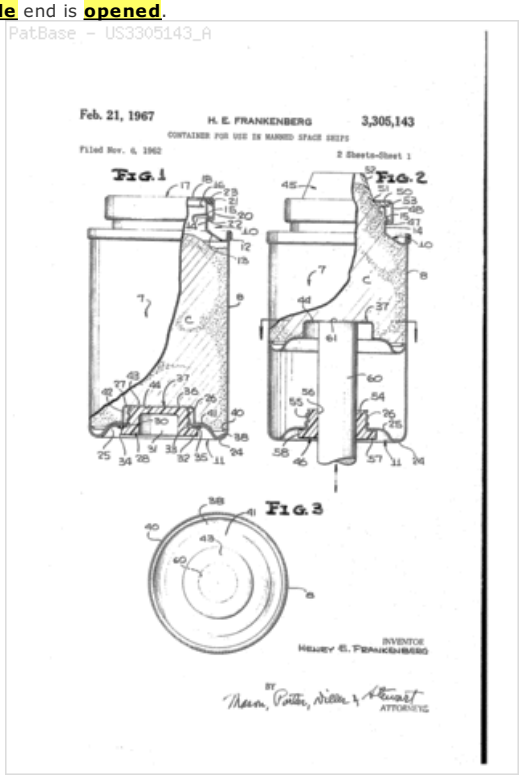
Title:	**CONTAINER** FOR USE IN MANNED SPACE SHIPS
Priority:	US19620235796 19621106

Family:

Publication number	Publication date	Application number	Application date
US3305143 A	19670221	US19620235796	19621106

Probable Assignee:	CONTINENTAL CAN CO
Assignee(s):(std):	CONTINENTAL CAN CO
Assignee(s):	CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC
Inventor(s):(std):	FRANKENBERG HENRY E
International class (IPC 8-9):	B65D83/00 (Advanced/Invention); B65D83/00 (Core/Invention)
International class (IPC 1-7):	B65D17/02
CPC:	B65D83/0005
European class:	B65D83/00A
US class:	222/386.5 222/510 222/545 222/568
Classification Explorer	
Cited documents:	US580052 A, US2954144 A, US2743044 A, US2587683 A, US2145613 A, US1964623 A, US1741326 A, US1474118 A, US1265533 A, US1235550 A, US1222185 A, GB451583 A,
Forward Citations:	WO06005147, US7959038, US4886189, US2011223299, US2010237094, US2009206104, US2008245823, US2008017662, EP1784345, EP0782964, EP0585931,

Abstract:
Source: US3305143A (Claim 1) 1. A **container** for use in manned spacecraft comprising a body including an upper **openable** end and a lower **open**-able end, an imperforate one-piece **closure** at each of said upper and lower **openable** ends, said **closures** having axes in parallel alignment with the body axis, first securing means removably securing said **closures** to said ends, a reciprocal expelling plate in said body adjacent said lower **openable** end and adapted for movement toward said upper **openable** end, an apertured adaptor, second securing means removably securing said apertured adaptor to said lower **openable** end upon the removal of said **closure** from said lower **openable** end, said first and second securing means including common complementary portions, said apertured adaptor including an axial aperture for permitting access into said body, and a plunger for introduction into said body through said axial aperture whereby the expelling plate may be moved toward said upper **openable** end to **dispense** contents therefrom when the upper **openable** end is **opened**.



223) Family number: 22850888 (US3307736A)

Title:	VACUUM **SEALABLE** **CONTAINER** FOR HYDRATABLE PRODUCTS
Priority:	US19640369371 19640522

Family:

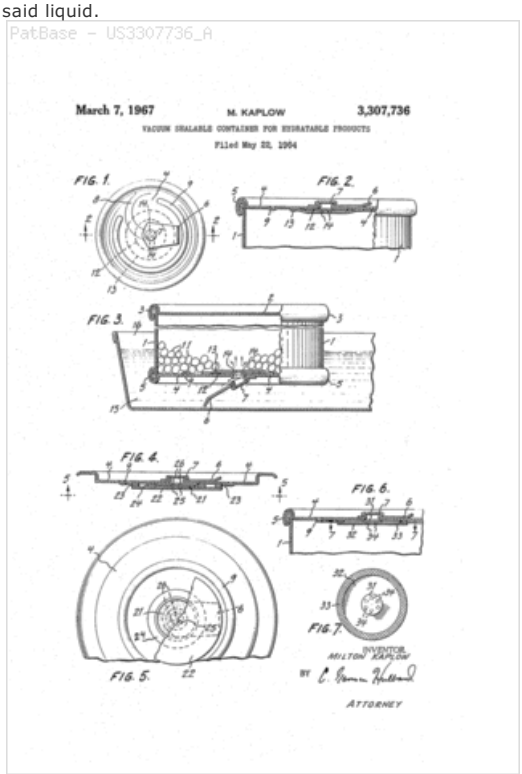
Publication number	Publication date	Application number	Application date
US3307736 A	19670307	US19640369371	19640522

Probable Assignee:	GEN FOODS CORP
Assignee(s):(std)**:**	GEN FOODS CORP
Assignee(s):	GENERAL FOODS CORP
Inventor(s):(std)**:**	MILTON KAPLOW
Inventor(s):	KAPLOW MILTON
International class (IPC 1-7):	B65D17/24
CPC:	B65D17/4011
European class:	B65D17/16B1
US class:	220/231 220/270 426/123

Classification Explorer

Cited documents:	US991354 A, US3071281 A, US2667423 A, US2633284 A, US2358598 A, US2307043 A, US2288895 A, US1464273 A, FR438261 A, FR1130591 A, CA544111 A,
Forward Citations:	US7311886, US5121851, US4127168, US3399806, US3367785, US2009214737, US2008135480, US2005031509,

Abstract:
Source: US3307736A (Claim 1) 1. A **container** for use in **packaging** and hydrating a liquid combinable product comprising, an elongate tubular body portion of air and moisture-impervious **packaging** material, end **closures** of similar **packaging** material joined to said body portion to define therewith a vacuum **sealed** enclosure, one of said end **closures** being formed with means manually actuable to rupture the material of said one end **closure** at a discrete area thereof, and means disposed in **sealing** relation to said discrete area for maintaining a vacuum **seal** for said **container** after the said one end **closure** is ruptured by said manually actu- able means, said vacuum maintaining means includirig a substance physically changeable to a nonsealing state when in contact with a product hydrating liquid to pern. it admittance of said liquid into said **container** when said one end **closure**, after being ruptured, is placed in fluid-tight communication with said liquid.



224) Family number: 22904478 (US3426959A)

Title: **PACKAGING** ASSEMBLY

Priority: US19640362868 19640427 US19670609397 19670116 US19680783320 19681212 US19730421114 19731203 US19710192378 19711026

Family:

Publication number	Publication date	Application number	Application date
US3311288 A	19670328	US19640362868	19640427
US3426959 A	19690211	US19670609397	19670116
US3615034 A	19711026	US19680783320	19681212
US3802594 A	19740409	US19710192378	19711026
US3946896 A	19760330	US19730421114	19731203

Probable Assignee: LEMELSON J

Assignee(s):(std)**:** LEMELSON J ; LEMELSON JEROME H

Assignee(s): JEROME H LEMELSON ; LEMELSON J US

Inventor(s):(std)**:** LEMELSON JEROME H ; LEMELSON J

Inventor(s): JEROME H LEMELSON ; LEMELSON J US

International class (IPC 8-9): B65D1/26 B65D17/50 B65D33/16 B65D41/32 B65D63/10 B65D75/66 B65D75/68 (Advanced/Invention); B65D1/22 B65D17/00 B65D33/16 B65D41/32 B65D63/10 B65D75/52 (Core/Invention)

International class (IPC 1-7): B29J5/00 B65D17/00 B65D17/16 B65D17/20 B65D33/30 B65D39/12 B65D41/32 B65D5/54 B65D75/66 B65D85/10

CPC: B29K2995/0082 Y10S383/905 B65D63/10 B65D33/165 B65D75/66 B65D75/68 Y10T24/157 B65D17/4012 B65D17/28 B65D17/402 B65D17/462 B65D1/26 B65D17/502 B65D2517/0008 B65D2517/0013 B65D2517/0064 B65D2517/5027 B65D2517/5062 B65D2517/5083

European class: B65D1/26 B65D17/16 B65D17/16B2 B65D17/16C B65D17/20 B65D17/50A1 B65D33/16D4 B65D63/10 B65D75/66 B65D75/68 L65D517/00Y1E L65D517/00Y2B L65D517/00Y7A2 L65D517/50M10A L65D517/50P4 L65D517/50Q5

US class: 220/2.7 220/266 220/267 220/27 220/270 220/273 220/276 220/359.2 220/359.4 229/65 24/30.5T 383/205 383/206 383/62 383/66 383/71 383/905 383/94

Classification Explorer

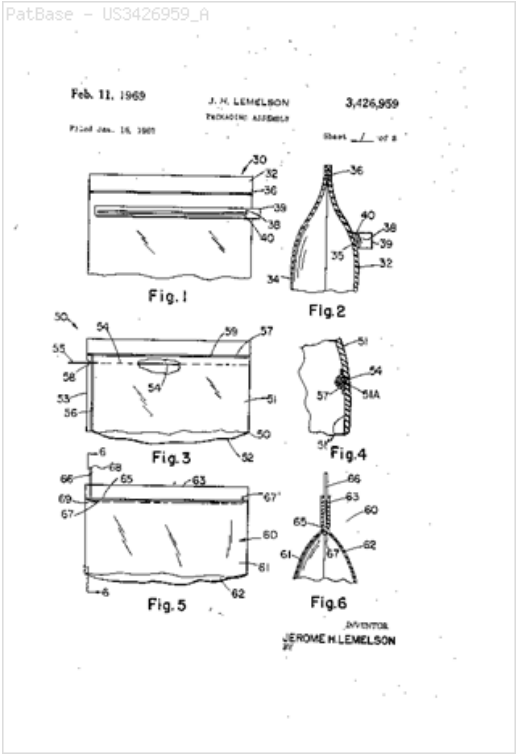
Cited documents: US3516852 A, US3276669 A, US3246833 A, US3227304 A, US3184149 A, US3163317 A, US3140815 A, US3119549 A, US3098601 A, US3094269 A, US3055575 A, US2973131 A, US2870935 A, US2868435 A, US2684807 A, US2630238 A, US2554160 A, US2549039 A, US2447096 A, US2322594 A, GB521830 A,

Forward Citations: WO8809260, WO8809260, WO8602055, WO8301416, WO12116421, USD572587, USD429735, US9554604, US8506745, US7946765, US7845514, US7681732, US7470063, US7459191, US7300395, US7175791, US7134569, US7131553, US7124908, US6994469, US6988642, US6779921, US6612620, US6585413, US6481891, US6460241, US6270257, US6189717, US6177172, US6173997, US6145891, US6086524, US6086117, US6079878, US5989683, US5988944, US5975299, US5967567, US5961155, US5960526, US5954433, US5951453, US5950876, US5865335, US5833392, US5829884, US5806984, US5692635, US5673534, US5600938, US5470419, US5461845, US5423447, US5333490, US5284002, US5257652, US5199794, US5167455, US4948268, US4915996, US4913294, US4838429, US4836378, US4815884, US4810103, US4781296, US4740163, US4720011, US4561540, US4549657, US4539237, US4529636, US4485935, US4428477, US4415393, US4407082, US4301939, US4266692, US3974960, US3905476, US3870189, US3788374, US3727829, US3716182, US3688973, US3685562, US3625270, US3619395, US3567102, US3554435, US3519193, US2013097769, US2012085760, US2011235951, US2011104544, US2011038565, US2010152010, US2009178945, US2008217346, US2008132394, US2007248290, US2007116388, US2007095698, US2006287181, US2006280386, US2006201626, US2006186147, US2006115188, US2006098902, US2006009339, US2006008603, US2005282695, US2005145626, US2005078890, US2004195239, US2004108098, US2004094557, US2004079765, US2003164572, US2003142887, US2003113042, ITMI20121170, FR2578783, FR2567103, EP2374729, DE4125295, DE3832412, DE3832412, DE202008016977,

Abstract:

Source: US3426959A ABSTRACT OF THE DISCLOSURE
This invention relates to a **package** or **container** formed of thin sheet material, e.g. metal foil, plastic sheeting or ig film, from which the contents thereof can be readily **dispensed** through a tear **opening** formed in a wall portion. The tear **opening** is defined by forming a line portion of the wall of the **container** of reduced thickness with means disposed along such line portion for effecting a controlled separation of the adjacent wall portion of the **container** along such line portion.

PatBase - US3426959_A



225) Family number: 23029112 (US3396900A)

© PatBase

Title: Tear tape for plastic **packaging** materials

Priority: US19640420974 19641224 US19660598571 19661021

Family:

Publication number	Publication date	Application number	Application date
GB1075989 A	19670719	GB19650054503	19651223
US3311032 A	19670328	US19640420974	19641224
US3396900 A	19680813	US19660598571	19661021

Probable Assignee: PROCTER AND GAMBLE

Assignee(s):(std)**:** PROCTER AND GAMBLE

Assignee(s): PROCTER AND GAMBLE CO ; PROCTOR AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY ; THE PROCTOR AND GAMBLE COMPANY

Inventor(s):(std)**:** LUCAS MALCOLM B

International class (IPC 8-9): B31B1/90 B65B61/18 B65D75/58 (Advanced/Invention); B65D75/46 (Advanced/Non-invention); B31B1/74 B65B61/18 B65D75/52 (Core/Invention); B65D75/00 (Core/Non-invention)

International class (IPC 1-7): B65B61/18 B65D5/54 B65D77/32 B65D85/56 B65D85/58

CPC: Y10T156/133 B65B61/182 B65D75/46 B65D75/5838 B31B50/8126 B31B50/8129

European class: B31B1/90 B65B61/18B B65D75/58E1A L31B201/90B3A L31B201/90B3D L65D75/46

US class: 156/519 206/445 229/51 383/205 493/332 493/378

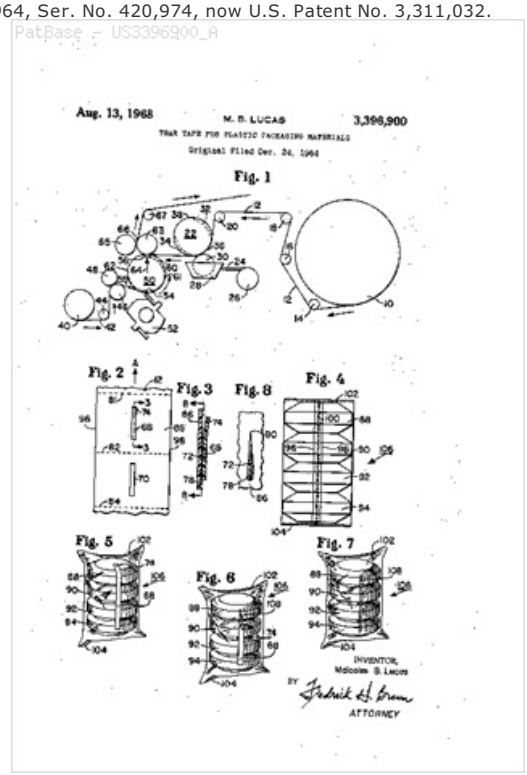
Classification Explorer

Cited documents: US3191507 A, US3166234 A, US3098601 A, US3088379 A, US3012481 A, US2991000 A, US2946434 A, US2760414 A, US2554160 A, US2334381 A, US2268474 A, GB625351 A,

Forward Citations: WO9718143, WO9527598, WO9210411, WO8607334, WO16174557, WO13037648, WO12150099, WO09130642, WO09130642, WO08086388, US9708104, US9688442, US9663282, US9656783, US9630761, US9604753, US9221590, US9205967, US9187228, US9150342, US8951591, US8889205, US8746483, US8722122, US8721814, US8408792, US8308363, US8114451, US7963413, US6915829, US6334711, US5766406, US5482593, US5456789, US5366295, US5261996, US4838982, US4781297, US4765118, US4696394, US4045275, US3711011, US3616990, US3520469, US3445056, US3392826, US2011127319, US2010303391, US2010127062, US2010055426, US2010018974, US2008240627, US2008037911, US2007275133, US2004007328, US2004007318, NL1000185, JP58171367, GB2295807, GB2295807, ES2128218, EP2189506, EP0692375, EP0601583, EP0471211, EP0134130, EP0134130, EA263, EA000263, DE19748510, DE102011089331, DE102011075313, DE102008058537, DE102006061812, AU697956,

Abstract:

Source: US3396900A ABSTRACT OF THE DISCLOSURE
A tear tape is adhered to the outer surface of a plastic **package** by the use of a hot-melt adhesive composition applied on a narrow elongated area of the outside surface of the plastic **packaging** material. The **package** is **opened** by pulling on one end of the tear tape which causes the plastic **packaging** material to tear along the edges of the adhered area. This application is a division under Rule 147 of co-pending patent application filed Dec. 24, 1964, Ser. No. 420,974, now U.S. Patent No. 3,311,032.



226) Family number: 22697701 (GB1066497A)

© PatBase

Title: A **cover** for a **container**

Priority: GB19640036805 19640908

Family:

Publication number	Publication date	Application number	Application date
GB1066497 A	19670426	GB19640036805	19640908

Probable Assignee: EKCO CONTAINERS

Assignee(s):(std)**:** EKCO CONTAINERS

Inventor(s):(std)**:** GRIESE ELMER WILLIAM

International class (IPC 1-7): B65D85/72

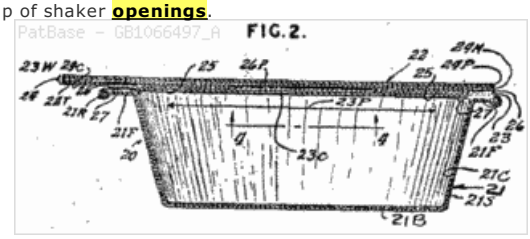
CPC: B65D77/206 B65D2577/2025 B65D2577/205 B65D2577/2091

European class: B65D77/20E1B3B2A L65D577/20L L65D577/20M1 L65D577/20P2

Classification Explorer

Forward Citations: GB2123786, FR2551031, FR2544611, EP2909098, EP1582477, EP0040797, DE2555912,

Abstract:
Source: GB1066497A 1,066,497. **Opening** **containers**; **packages**. EKCO **CONTAINERS** Inc. Sept. 8, 1964, No. 36805/64. Headings B8C and B8D. An aluminium foil **container** having a coating 21c of heat-**sealing** adhesive is closed by a laminated **cover** 22 comprising a wall 24 formed with a pull **tab** 22T and attached to a removable portion 23P of a lower wall 23 enabling a circular **opening** (23-1), Fig. 1, to be formed in the **cover** 22 when the **tab** 22T is pulled. The wall 24 is a laminate of paper 24P and aluminium foil 24M, and the wall 23 is of aluminium foil which is pre-cut to define the portion 23P. Layers of heat-**sealing** adhesive 23c, 24c **cover** the undersides of the walls 23, 24 respectively. By this means wall 24 is heat-**sealed** to the wall 23 in an annular area 26 and to the portion 23P in an area 26P. The **covers** 22 may be applied to the **containers** in stip or group form, or separately, after the **containers** are filled, e.g. with a volatile burnable substance. Each **cover** 22 may be formed of two layers of aluminium foil, Fig. 4A, adhered to one another on the same pattern as in Fig. 2. The removable portion in the lower wall may take the form of a group of small circular areas, Figs. 5-7, providing perforations for a salt or pepper shaker. Again, the removable portion may be triangular, Figs. 8-10, to provide a pouring **opening**; or the **container** may be of rectangular plan, Figs. 11-13, the removable portion taking the form of a pouring **opening** in one corner and a vent **opening** in a diagonally opposite corner. By providing a pull-**tab** at each of two diametrically opposed positions on a circular **container**, Figs. 14-16, either half of the **cover** may be hinged separately about a central division formed by a **seal**. Each half is re-closable, one providing a segmental **opening** for a measuring spoon, the other a group of shaker **openings**.



227) Family number: 56395 (US3377945A)

© PatBase

Title: APPARATUS FOR DENSIFYING POWDERED SOLIDS

Priority: US19650509282 19651123

Family:

Publication number	Publication date	Application number	Application date
AU1408166 A1	19680523	AU19660014081	19661117
BE690041 A	19670522		19661122
DE1302382 B	00000000		00000000
GB1133199 A	19681113	GB19660052370	19661123
US3377945 A	19680416	US19650509282	19651123

Probable Assignee: MONSANTO CO

Assignee(s):(std)**:** MONSANTO CO

Assignee(s): MONSANTO COMPANY

Inventor(s):(std)**:** DAVIS WALTER M

Inventor(s): WALTER MYRON DAVIS

International class (IPC 8-9): B30B11/04 B30B15/00 B65B1/24 B65B1/26 C01B33/113 C01D7/37 C01D7/38 C01F11/16 C09C1/56 C09C3/04 (Advanced/Invention);
B30B11/02 B30B15/00 C01B33/00 C01D7/00 C01F11/00 C09C1/44 C09C3/04 (Core/Invention)

International class (IPC 1-7): B01J19/00 B01J2/22 B30B11/00 B30B11/02 C09C1/56

CPC: C01P2006/10 C09C3/046 B30B11/04 B30B15/0017 C01B33/113 C01D7/37 C01D7/38 C01F11/16 C09C1/56

European class: B30B11/04 B30B15/00B3 C01B33/113 C01D7/37 C01D7/38 C01F11/16 C09C1/56 C09C3/04H

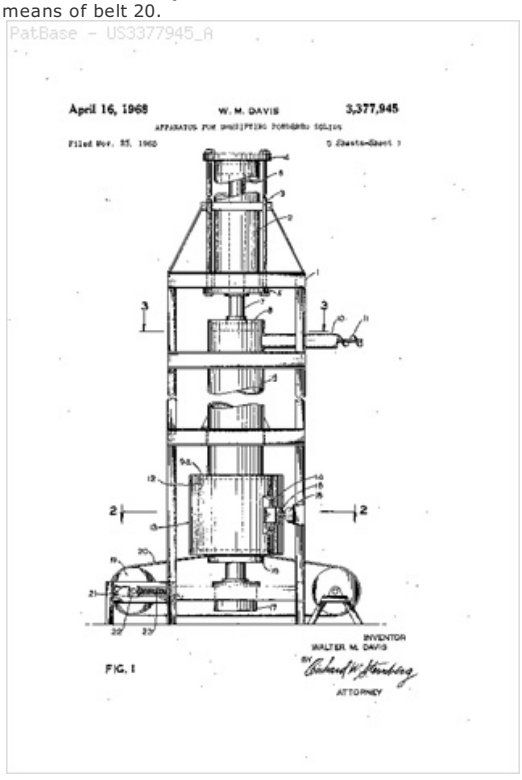
US class: 100/122 100/127 100/255 100/90 141/80

Classification Explorer

Cited documents: US772472 A, US315529 A, US3053022 A, US2984172 A, US2959900 A, US2780247 A, US2633074 A, US2607435 A, US2488395 A, US2343871 A, US2244078 A,

Forward Citations: WO9912813, WO8404286, WO0208062, US6112501, US5943846, US5809744, US5039294, US4572065, US4457125, US4326852, US4273037, US4008658, US3827210, US3460464, GB2219242, GB2219242, EP1409348, EP0590523, DE4330344,

Abstract:
Source: GB1133199A 1,133,199. Compressing powder under vacuum. MONSANTO CO. 23 Nov., 1966 [23 Nov., 1965], No. 52370/66. Heading B5A. Dry powdered solid, e.g. silica, containing occluded or included gas may be compressed while under vacuum. The solid may be fed to the compression chamber by vacuum. The compressive force is preferably 100-150 lb./in.^{2} and is preferably applied until the solid does not change in volume on removal of the force. The apparatus comprises a compression chamber 13, **openable** for removal of solid, having an exhaust port (41, Fig. 5, not shown) communicating with the interior of the compression chamber to evacuate it and a compression head 8 to compress the powder into an end section 9 of the chamber which has a perforated lining (39). There is preferably a filter, e.g. porous **bag** (38) to retain solid in the chamber during evacuation. The compression head may be a piston head 8 operable in a cylindrical section 9 of the chamber, the chamber being **openable**, e.g. at the bottom of the chamber, the **openable** section having an exhaust port (41, Fig. 5) communicating with its interior. There may be means 10 to feed powder to the chamber between the upper and lower positions of the piston, e.g. a compression head (54, Fig. 7, not shown) operating in another compression chamber. The **openable** section has a detachable base, e.g. piston head 18, there being a **seal** between base and walls by means of belt 20.



228) Family number: 58780 (US3406892A)

© PatBase

Title: CONTAINER CLOSURE

Priority: US19660535241 19660317

Family:

Publication number	Publication date	Application number	Application date
BE693687 A	19670717		19670206
DE1586599 A1	19700820	DE19671586599	19670216
DE1586599 C3	19730620	DE1967E033402	19670216
FI47069 B	19730531	FI19670000449	19670215
FI47069 C	19730910	FI19670000449	19670215
FR1514730 A	19680223	FR19670099053	19670316
GB1109773 A	19680418	GB19670005038	19670202
NL6703866 A	19670918	NL19670003866	19670314
NO125310 B	19720821	NO19670166577	19670126
SE335502 B	19710524	SE19670003301	19670309
US3406892 A	19681022	US19660535241	19660317

Probable Assignee: EX CELL O CORP

Assignee(s):(std)**:** EX CELL O CORP

Assignee(s): EX CELL O CORP US ; EX CELLO O CORP

Inventor(s):(std)**:** B EGLESTON HARRY ; EGLESTON H ; EGLESTON HARRY B ; ENGLESTON ; FELIKS ; FELIKS J ; FELIKS JAMES J ; FELIKS JAMES JOSEPH ; JOSEPH FELIKS JAMES

Inventor(s): FELIKS J US ; ENGLESTON HARRY B ; EGLESTON H US

International class (IPC 8-9): B65D5/06 B65D65/40 (Advanced/Invention); B65D5/02 B65D65/40 (Core/Invention)

International class (IPC 1-7): B65D5/06 B65D5/08 B65D5/26 B65D5/28 B65D5/40

CPC: Y10S229/941 B65D5/0281 B65D5/061

European class: B65D5/02J B65D5/06B

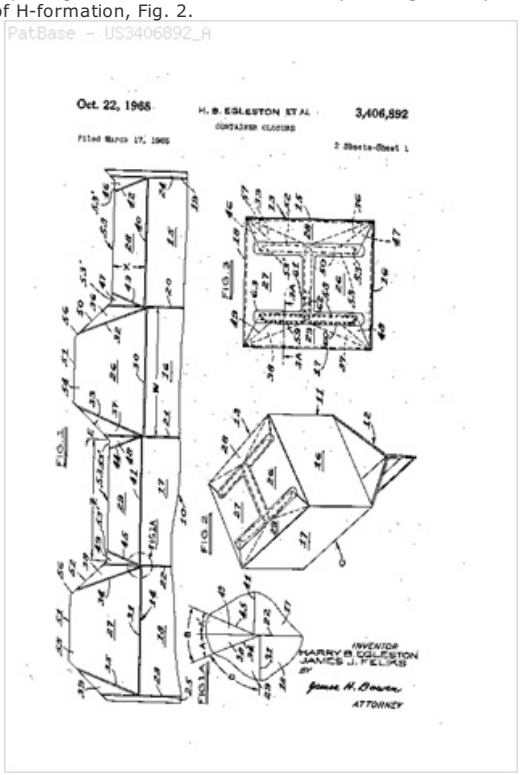
US class: 229/183 229/184 229/249 229/37 229/941

Classification Explorer

Cited documents: US3035750 A, US3029997 A, US2596225 A, US2581237 A, US2358124 A,

Forward Citations: US5683339, US5588943, US5482204, US4341340, US3462067, FR2503094, FR2359035, FR2359035,

Abstract:
Source: US3406892A 1,109,773. Liquid **containers**. EX-CELL-O CORPORATION. 2 Feb., 1967 [17 March, 1966]. No.5038/67. Heading B8P. A **container** of heat-**sealable** thermoplastic polymeric sheet material is closed at one end by panels integral with the sides of the body and which are infolded in overlapping relation in such manner that only the outer two plies of material at any one location are required to be heat **sealed** to each other to form a liquid-tight **seal**. The end **closure** flaps of a gable-top **container** are of the configuration shown in Fig. 1, and the heat **seal** is of H-formation, Fig. 2.



229) Family number: 21872875 (US3338460A)

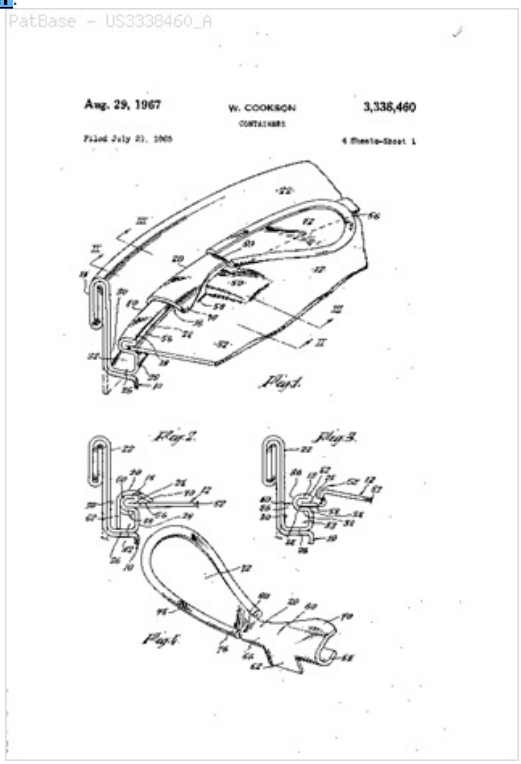
Title:	**CONTAINERS**
Priority:	GB19650014930 19650408

Family:

Publication number	Publication date	Application number	Application date
GB1147182 A	19690402	GB19650014930	19650408
US3338460 A	19670829	US19650473623	19650721

Probable Assignee:	COOKSON SHEET METAL DEV LTD
Assignee(s):(std):	COOKSON SHEET METAL DEV LTD
Assignee(s):	COOKSON SHEET METAL DEVELOPMENTS LIMITED ; COOKSON SHEET METAL DEVELOPMENTS LTD
Inventor(s):(std):	COOKSON WILLIAM ; WILLIAM COOKSON
International class (IPC 8-9):	B65D17/32 (Advanced/Invention); B65D17/28 (Core/Invention)
International class (IPC 1-7):	B65D17/32
CPC:	B65D17/28
European class:	B65D17/16
US class:	220/269
Classification Explorer	
Cited documents:	US3250424 A, US3176871 A,
Forward Citations:	US3967753,

Abstract:
Source: GB1147182A 1,147,182. **Opening** **containers**. COOKSON SHEET METAL DEVELOPMENTS Ltd. 7 April, 1966 [8 April, 1965; 14 June, 1965; 24 June, 1965; 26 July, 1965; 11 Oct., 1965; 12 Nov., 1965; 14 Dec., 1965], Nos. 14930/65, 24962/65, 26888/65, 31910/65, 43060/65, 48100/65 and 53051/65. Heading B8D. The end wall 9, or lid, of a **container** 7 is provided, adjacent a shoulder 27, with a circular line of weakness 35 interrupted by a stop 37, and a peripherally extending channel 19 in which is retained a flange 45 of an **opening** device 13, the handle 41 of which is formed with a central rib 51, one end of which provides camming means 53. To **open** the **container**, the member 45 is positioned adjacent the stop 37 and the handle 41 is raised at its inner end. The device bends about lines 65, projecting the sharp end 54 of the camming means 53 against or adjacent the line of weakness, and puncturing the end wall. When the handle is vertical, the camming means 53 rests on the bent down portion of the end wall. On sliding the device around the **container** the central portion of the end wall is removed by tearing the line of weakness. Alternatively, Figs. 1-6 (not shown) accompanying Provisional Specification 53051/65, the device handle (280) may extend tangentially inside the **container** rim. Again, Figs. 1-7 (not shown) accompanying Provisional Specification 31910/65, the end wall is provided with spaced parallel shoulders (102) defining a raised portion (149) along a diameter of the end wall (88), along which a similar **opening** device (132) slides to bend **open** a U-shaped portion (94) defined in the raised portion by a line of weakness (110). An alternative embodiment, Figs. 1-4 (not shown), accompanying Provisional Specification 43060/65, also relates to a similar **opening** device for a U-shaped portion. The lines of weakness may be formed alternatively or additionally on the inside end wall surface. The end wall and slider may be formed of tinplate, aluminium or plastics. The **opening** device may be applied to any wall of the **container**.



230) Family number: 23024701 (US3338019A)

Title:	METHOD OF **PACKAGE** MANUFACTURE
Priority:	US19620218709 19620822 US19650529166 19651203

Family:

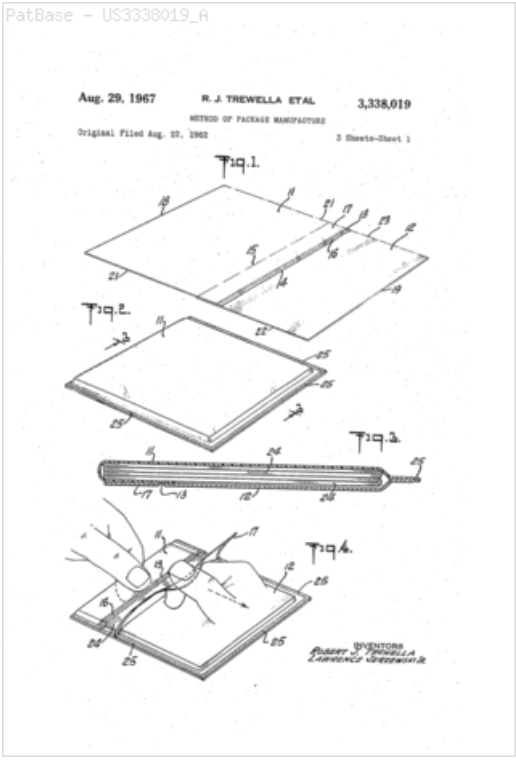
Publication number	Publication date	Application number	Application date
US3338019 A	19670829	US19650529166	19651203

Probable Assignee:	JOHNSON AND JOHNSON
Assignee(s):(std):	JOHNSON AND JOHNSON
Inventor(s):(std):	TREWELLA ROBERT J ; JERZEWSKI JR LAWRENCE
Inventor(s):	JR LAWRENCE JERZEWSKI
International class (IPC 8-9):	B31B23/00 B65D75/58 (Advanced/Invention); B65D75/46 (Advanced/Non-invention); B31B23/00 B65D75/52 (Core/Invention); B65D75/00 (Core/Non-invention)
CPC:	B65D75/5855 B65D75/46 B31B70/00 B31B2155/00 B31B2155/001 B31B2155/0014 B31B2155/002 B31B2160/10
European class:	B31B23/00 B65D75/58F L31B237/10 L31B237/40 L31B237/40B L31B237/50 L65D75/46
US class:	206/440 383/210 493/189 53/412 53/450

Classification Explorer

Cited documents:	US2213602 A, US1702325 A,
Forward Citations:	WO14164261, WO03035383, USD474680, US8979370, US8944250, US7967134, US7520383, US7413079, US7178671, US7168563, US7137507, US6974406, US6913146, US6708823, US6705465, US6681934, US6601706, US6279297, US6260699, US5833061, US5584163, US5502946, US5468252, US5462162, US5454207, US5386912, US5366081, US5359831, US5301490, US5277299, US5222978, US5220769, US5217772, US5178277, US5161350, US5129511, US5123528, US4826009, US4667453, US4567711, US3998135, US3942713, US3904166, US3884011, US3851814, US3819106, US3761013, US3754700, US3696920, US3685720, US3618756, US3481099, US3472369, US3419136, US2012195531, US2009230002, US2006096880, US2006096879, US2005175133, US2005029144, US2004149614, US2004149613, US2004084331, US2003089633, US2002060167, NL1038061, NL1002585, EP2399832, EP1820634, AT385967,

Abstract:
Source: US3338019A (Claim 1) 1. A method of forming a **package** adapted to permit sterilization of its contents and interior surfaces subsequent to **sealing** and removal of the contents without loss of sterility after **opening**, which comprises placing two sheets of flexible **packaging** material in overlapping relationship, joining the two sheets together by forming a first rupturable **seal** line between them within the area in which the sheets overlap, said rupturable **seal** line being spaced from the transverse edges of said overlapping area, so that the edge of each of the two sheets adjacent said rupturable **seal** line is free, folding the joined sheets of flexible **packaging** material together in a direction generally perpendicular to a straight line connecting the ends of the first rupturable **seal** line to form a pocket, placing an article to be **packaged** within said pocket and forming at least one additional rupturable **seal** line between the folded-together portions of the previously joined sheets to close said pocket around said articles whereby a **package** is formed having two flaps adjacent to said first **seal** line, one of said flaps being inside and one outside the **package**.



231) Family number: 21872891 (US3338461A)

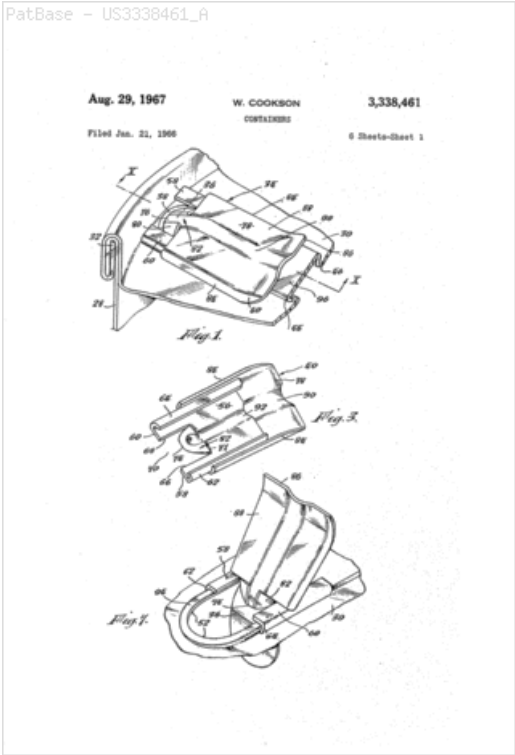
Title:	**CONTAINERS**
Priority:	GB19650024962 19650614

Family:

Publication number	Publication date	Application number	Application date
US3338461 A	19670829	US19660522100	19660121

Probable Assignee:	COOKSON SHEET METAL DEV LTD
Assignee(s):(std):	COOKSON SHEET METAL DEV LTD
Assignee(s):	COOKSON SHEET METAL DEVELOPMENTS LIMITED ; COOKSON SHEET METAL DEVELOPMENTS LTD
Inventor(s):(std):	WILLIAM COOKSON
Inventor(s):	COOKSON WILLIAM
International class (IPC 8-9):	B65D17/32 (Advanced/Invention); B65D17/28 (Core/Invention)
International class (IPC 1-7):	B65D17/32
CPC:	B65D17/521
European class:	B65D17/18
US class:	220/269
Classification Explorer	
Cited documents:	US3250424 A, US3176871 A,
Forward Citations:	US4108331, US3994413, US3970211, US3912633, US3730379, US2014263340,

Abstract:
Source: US3338461A (Claim 1) 1. In a **container** wall formed of relatively thin sheet material, **opening** meanscomprising a runway; i5 a slider **opening** device engageable therewith to slide therealong; a portion of the sheet material weakened along a line; and means provided on the slider **opening** device for parting the material of the wall along the weakened line as the slider **opening** device is slide along the runway.



232) Family number: 25845735 (US3407969A)

Title: Cardboard fluid **container**

Priority: DE1966H058748 19660308

Family:

Publication number	Publication date	Application number	Application date
AT270497 B	19690425	AT19670001194	19670208
CH461356 A	19680815	CH19670003235	19670306
DE1536066 A1	19710908	DE1966H058748	19660308
DE1536066 B1	19710708		19660308
FR1511453 A	19680126	FR19670095047	19670215
GB1130807 A	19681016	GB19670006044	19670208
NL6703294 A	19670911	NL19670003294	19670228
SE308082 B	19690127	SE19670002205	19670217
US3407969 A	19681029	US19670620849	19670306

Probable Assignee: HASSIA VERPACKUNG AG

Assignee(s):(std)**:** HASSIA VERPACKUNG AG ; HASSIA VERPACKUNGSMASCHINEN G ; HASSIA VERPACKUNGSMASCHINEN GMBH

Assignee(s): HASSIA VERPACKUNGSMASCHINEN G M B H ; HASSIA VERPACKUNGSMASCHINE GMBH

Inventor(s):(std)**:** WALTER KURT ; KLEIN KARL ; WALTER K ; KURT WALTER ; KLEIN K ; KARL KLEIN

International class (IPC 8-9): B29C51/16 B41B1/02 B65B3/02 B65B47/10 B65B9/04 B65D75/32 B65D75/52 (Advanced/Invention); B29C51/00 B41B1/00 B65B3/00 B65B47/00 B65B9/00 B65D75/28 B65D75/52 (Core/Invention)

International class (IPC 1-7): B31B17/00 B65B3/02 B65B47/10 B65B9/04 B65D5/40 B65D5/52 B65D85/72

CPC: B29C51/165 B41B1/02 B65B3/02 B65B9/042 B65B47/10 B65D75/32 B65D75/326 B65D75/52 B65D2207/00 B65D2575/3245

European class: B29C51/16C B41B1/02 B65B3/02 B65B47/10 B65B9/04B B65D75/32 B65D75/32D1 B65D75/52 L65D207/00 L65D575/32Y1D

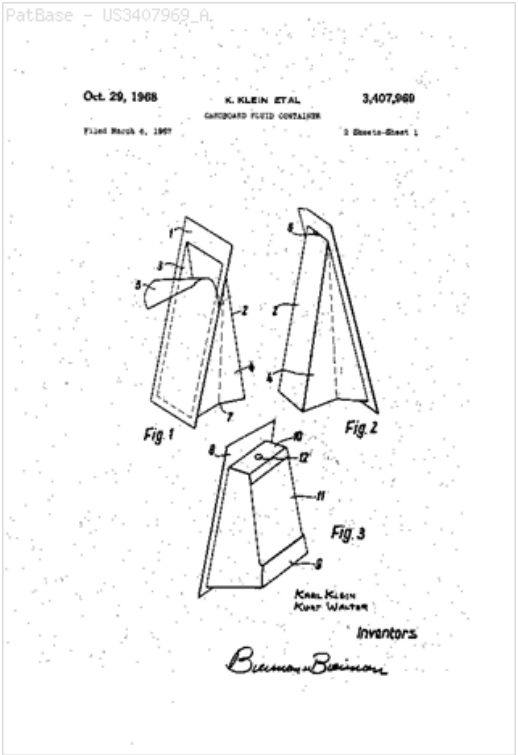
US class: 222/107 229/104 229/111 229/115 229/125.15 229/125.35 493/103 493/56 53/456

Classification Explorer

Cited documents: US3333684 A, US3263848 A, US3018879 A, US2682355 A, FR1437667 A, DE836170 A, DE1735579 U, DE1732871 U, AU244443,

Forward Citations: WO08085041, USD802412, USD682710, USD676334, USD670573, USD669367, USD663631, USD660719, USD660718, USD652719, USD652718, USD652298, USD649406, USD644101, USD641642, USD641238, USD640921, USD636220, USD634643, USD632570, USD632569, USD632568, USD632567, USD632566, USD632565, USD632564, USD632560, USD629702, USD628903, USD623074, USD623073, USD623072, USD621719, USD620809, USD579236, USD579235, USD537712, US9815606, US9061796, US8997992, US8844757, US8403161, US5390817, US4917240, US4301926, US3908828, US2017029190, US2012325831, US2010320206, US2010270330, US2010176125, US2009301923, US2008112750, US2007164045, FR2086277, EP1942058,

Abstract:
Source: GB1130807A 1,130,807. Bubble packs. HASSIA VERPACKUNGSMASCHINEN G.m.b.H. 8 Feb., 1967 [8 March, 1966], No. 6044/67. Heading B8C. Relates to a **container**, and a process for making it, wherein a cardboard backing, e.g. 1 or 8 has an aperture, e.g. 3 formed in it by cutting out and folding back at least one flap, e.g. 2 or 9 or 10, a plastics foil, e.g. 4 or 11 being drawn through the aperture and **sealed** on to the cardboard backing and flap, and a **closure** foil, e.g. 5 being **sealed** over the aperture. As described, see Fig. 4, a continuous cardboard strip 21 is delivered from a roll 22 to a **stamping** station 23 where apertures are formed by threesided **stamping** out of flaps 24. The strip 21, which is preferably coated with heat **sealable** material, is led into a station 27 where a foil 26 is deep-drawn through each aperture and **sealed** to the strip 21 and flap 24. At stations 29, 30 the **container** is filled and a **closure** film 31 applied to the aperture; finally the **container** is severed from the backing strip 21. The **container** may be formed with fold lines 7 to facilitate expulsion of the contents by squeezing, Fig. 1. An aperture 12, preferably of the tear-off kind, may be provided in a flap. The **container** interior may have an inert gas atmosphere.



233) Family number: 30039471 (US3343332A)

Title: PACKAGING APPARATUS AND METHOD OF PACKAGING

Priority: US19640368926 19640520

Family:

Publication number	Publication date	Application number	Application date
DE1461996 A1	19690327	DE19651461996	19650519
GB1103408 A	19680214	GB19650021473	19650520
SE331051 B	19701207	SE19650006596	19650520
US3343332 A	19670926	US19640368926	19640520

Probable Assignee: MAHAFFY AND HARDER ENG CO

Assignee(s):(std)**:** MAHAFFY AND HARDER ENG CO ; MAHAFFY U HARDER ENGINEERING ; MAHAFFY UND HARDER ENGINEERING

Assignee(s): MAHAFFY UND HARDER ENGINEERING COMPANY ; MAHAFFY U HARDER ENGINEERING CO ; MAHAFFY AND HARDER ENGINEERING CO ; MAHAFFY AND HARDER ENGINEERING COMPANY

Inventor(s):(std)**:** ALEXANDER MAHAFFY REID ; HARDER J ; HARDER JOHN R ; MAHAFFY R ; MAHAFFY REID A ; PINNEY W ; PINNEY WESLEY ; PINNEY WESLEY W ; RICHARD HARDER JOHN

International class (IPC 8-9): B65B25/06 B65B47/00 B65B9/04 (Advanced/Invention); B65B25/00 B65B47/00 B65B9/00 (Core/Invention)

International class (IPC 1-7): B65B9/04

CPC: B65B9/04 B65B25/067 B65B47/00

European class: B65B25/06D1 B65B47/00 B65B9/04

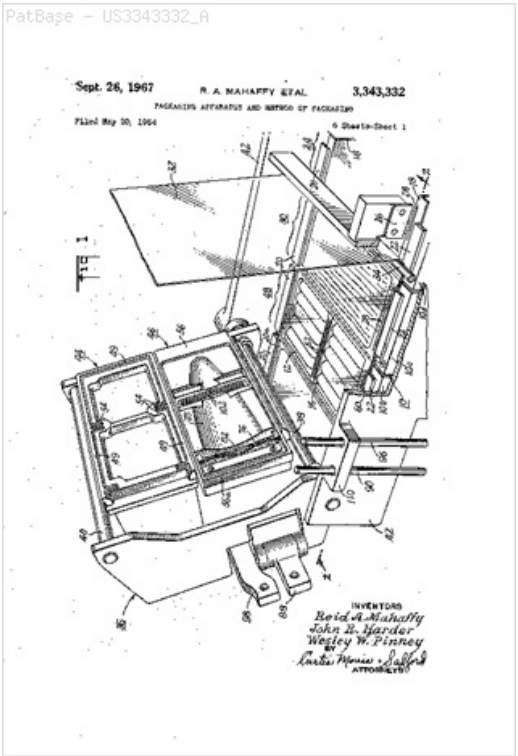
US class: 53/433 53/453 53/511

Classification Explorer

Cited documents: US3196590 A, US3061984 A,

Forward Citations: WO17174667, WO13058711, US9567124, US9555513, US6202388, US5509252, US5419096, US5247746, US4896479, US4835942, US4831811, US4777782, US4055671, US3832828, US3775932, US3597899, US3537229, US3481100, US3444665, US3397507, US2014331602, US2013212988, US2012291400, JP6193866, JP2015502296, JP2015502296, GB2179621, GB2179621, DE102010019729, CN104024122, CN104024122,

Abstract:
Source: GB1103408A 1,103,408. Packaging-machines. MAHAFFY and HARDER ENGINEERING CO. 20 May, 1965 [20 May, 1964], No. 21473/65. Heading B8C. A packaging machine of the kind comprising an endless series of linked dies in which a web is moulded to form joined containers and afterwards filled and closed by another web after evacuation, while still in the die, has removable die partition members enabling the machine to produce a pair of packages from each die. The die and die partition have resilient beading at their upper edges with tight seal forming means adjacent the ends of the partition. The lower web 18 may be drawn into the dies as in Speci - fication 949,747 and loaded with frankfurters c. by means as described in Specification 1,036,929. The partition 16 (shown fitted in only one die) is located by friction and lugs 113 entering recesses in the die base, Fig. 6 (not shown). Clamps 22 grip the web edge and a cutter 26 forms an evacuation opening. The second web 32 overlies the clamps on the evacuation side and when the sealing head holder 36 (shown as hinged back for maintenance c.) is lowered, is pushed up against a resilient member 76 on the head by a vertically reciprocating combined web raiser and evacuation nozzle 28, see also Figs. 3-5 (not shown). The head comprises an initial partial sealer 44 which leaves the webs unsealed on the evacuation side and along most of the partition, and a final sealer 46 which includes two bars 82, 102 reciprocable vertically relative to the head, the latter itself being vertically reciprocable. The bars 82, 102 complete the package closure, the latter forming, with beads 52 on the partition, parallel spaced seals enabling the twin packages to be separated. If the partitions are not used, the bar 102 may be disenabled by removal of its operating push rod 96. The web raiser may be used to introduce inert gas into the packages.



234) Family number: 23009689 (US3346166A)

Title:	RECLOSABLE **DISPENSING** **CONTAINER** WITH LOCKING FLAP
Priority:	US19670618956 19670227

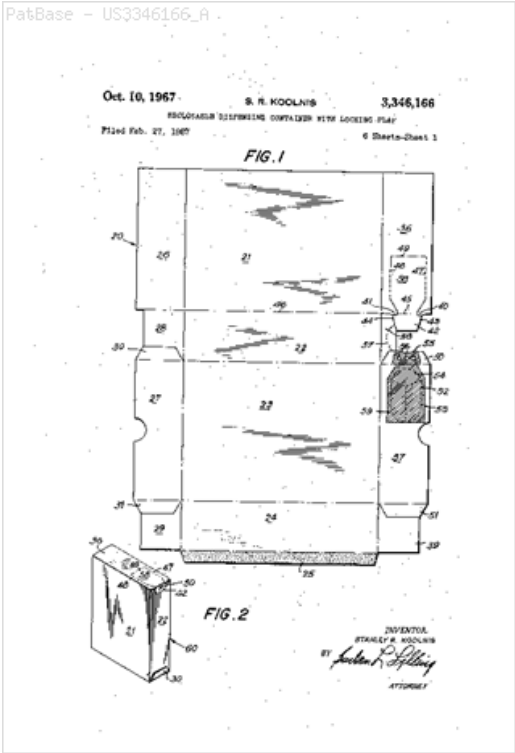
Family:

Publication number	Publication date	Application number	Application date
DE1586589 A1	19700625	DE19671586589	19671006
FR1551086 A	19681227		19671006
US3346166 A	19671010	US19670618956	19670227

Probable Assignee:	FRED ZANDELL
Assignee(s):(std):	DRECHSLER LEE ; FRED ZANDELL ; LEE DERCHSLER ; ZANDELL FRED
Inventor(s):(std):	R KOOLNIS STANLEY ; KOOLNIS STANLEY R
International class (IPC 8-9):	B65D5/70 (Advanced/Invention); B65D5/70 (Core/Invention)
International class (IPC 1-7):	B65D5/70
CPC:	B65D5/701
European class:	B65D5/70B
US class:	229/209 229/212 229/232
Classification Explorer	
Cited documents:	USRE25449 E, US3270941 A, US3187978 A, US3096922 A, US2812127 A, US2812126 A, US2358923 A,
Forward Citations:	USD594744, US5655661, US5333781, US5054619, US5050742, US4909395, US4043503, US3570745, US3387763,

Abstract:
Source: FR1551086A (Claim 1) **ATTENTION** debut du champ CLMS peut contenir fin de DESC **. long des lignes de dechirure 47d et 48d. On peut alors acceder a l'interieur de la boite 60d en ouvrant le long d'une ou de plusieurs des lignes de dechirure 54d, afin de produire un orifice de distribution.

Machine translation: (Claim 1) ** WARNING ** start of CLMS field may contain end of DESC **. Long lines 47d and 48d tear. You can then access the inside of the **box** 60d **opening** along one or more tear lines 54d, to produce a **dispensing** orifice.



235) Family number: 30944757 (US3476515A)

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Title: ANALYTICAL TEST PACK AND PROCESS FOR ANALYSIS

Priority:

DE19671798454 19670426	DK19670002207 19670426	DK19730002468 19730504
DK19790001154 19790321	US19680696718 19680110	US19680740055 19680626
US19680752744 19680815	FR19670104150 19670425	US19660545494 19660426
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Family:

Publication number	Publication date	Application number	Application date
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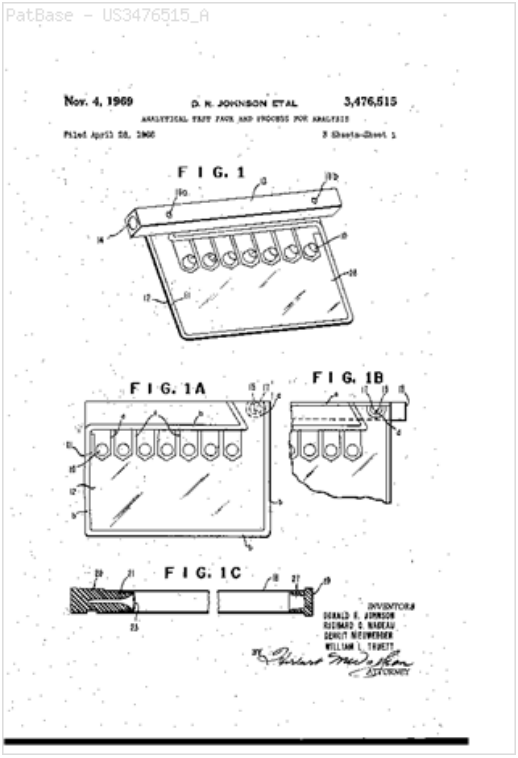
Probable Assignee:	BP CHEMICALS LTD
Assignee(s):(std)**:**	DU PONT ; E I DU PONT DE NEMOURS AND CO WILMINGTON DEL V S ; SYNVAR ASS ; HENRY J KOEBER JR ; PONT DE NEMOURS AND CO E I ; SYNTEX ENERGY RES INC ; PONT DE NEMOURS E I ; MONSANTO COMPANY TE ST LOUIS MISSOURI VER ST V AM ; PONT DE NEMOURS AND CO ; SYNVAR ASSOCIATES ; SYVA CORP ; MONSANTO CO ; VARIAN ENERGY
Assignee(s):	HADEN JUN ; MONSANTO CO TE STLOUIS MISSOURI VER ST V ; SYVA CO ; SYNTEX ENERGY RESEARCH INC ; MONSANTO CO ST LOUIS MO V ST A ; MONSANTO CY ; MONSANTO COMPANY ; JAMES E MCERLANE ; ELBERT P CARTER ; GERRIT NIEUWEBOER ; RICHARD G NADEAU ; EI DU PONT DE NEMOURS AND CO WILMINGTON DELAWARE VER ST V AM ; INDENTIMATION CORP ; SYVA CORP US ; MONSANTO CO US ; BP CHEMICALS LTD ; DADE MICROSCAN INC ; DEUTSCHE BANK AG ; E I DU PONT DE NEMOURS AND CO WILMINGTON DEL V ST A ; E I DU PONT DE NEMOURS AND CO WILMINGTON DEL (V ST A) ; E I DU PONT DE NEMOURS AND CO 19898 WILMINGTON DEL U ; E I DU PONT DE NEMOURS AND COMPANY WILMINGTON DELAWARE VER ST V AM ; DUPONT DE NEMOURS ; E I DU PONT DE NEMOURS AND CO ; EI DU PONT DE NEMOURS AND CO ; E I DU PONT DE NEMOURS AND CO US ; E I DU PONT DE NEMOURS CO US ; E I DU PONT DE NEMOURS AND COMPANY ; E I DU PONT DE NEMOURS AND CO WILMINGTON DEL V ST ; E I DU PONT DE NEMOURS AND COMPANY WILMINGTON DELA ; E I DU PONT DE NEMOURS CO
Inventor(s):(std)**:**	JOHNSON D R ; JOHNSON DONALD RICHARD ; JOHNSON DONALD RICHARD WILMINGTON ; MCERLANE J E ; MCERLANE JAMES E ; NADEAU G ; NADEAU R G ; NADEAU RICHARD GEORGE ; GERRIT NIEUWEBOER ; H OSIECKI JEANNE ; HARVEY CRADDOCK JOHN ; HELEN OSIECKI JEANNE ; RICHARD GEORGE NADEAU ; RICHARD JOHNSON DONALD ; TRUETT W ; TRUETT W L ; TRUETT WILLIAM LAWRENCE ; TRUETT WILLIAM LAWRENCE BLACKWOOD NJ ; TRUTT W L ; WILLIAM LAWRENCE TRUETT ; LAWRENCE TRUETT WILLIAM ; GEORGE NADEAU RICHARD ; FRANK ROTH JAMES ; FISHER ULLMANN EDWIN ; F ULLMANN EDWIN ; EDWARD PAULIK FRANK ; DONALD RICHARD JOHNSON ; DEL ; CLAYMONT ; CARTER ELBERT P ; CARTER E P ; BROOKE BOOCOCK DAVID GAVIN ; BOOCOCK DAVID G B ; WILMINGTON DEL ; TRUETT WILLIAM L ; ROTH JAMES F ; PIDGEON CARTER ELBERT ; PAULIK FRANK E ; O DORCHAI RAPHAEL ; NIEUWEBOER GERRIT ; NIEUWEBOER G ; NADEAU RICHARD G ; NADEAU R ; JOHNSON D ; HERSHMAN ARNOLD ; EDWARD MCERLANE JAMES ; CRADDOCK JOHN H ; CLAYMONT DEL ; CARTERM ELBERT PIDGEON ; CARTER E ; MC ERLANE J ; JOHNSON DONALD R ; ULLMAN E ; OSIECKI J ; ROTH JAMES FRANK ; PAULIK FRANK EDWARD ; MCERLANE JAMES EDWARD ; DORCHAI R ; CRADDOCK JOHN HARVEY ; CARTER ELBERT PIDGEON ; BOOCOCK D ; ROTH J ; PAULIK F ; HERSHMAN A ; CRADDOCK J
Inventor(s):	ARNOLD HERSHMAN ; FRANK E PAULIK ; CRADDOCK J US ; JOHN H CRADDOCK ; JAMES F ROTH ; HERSHMAN A US ; PAULIK F US ; ROTH J US ; BOOCOCK D CA ; CREVE COEUR ; CRADDOCK JOHN HARVEY BALLWIN ; DORCHAI R EI ; OSIECKI J US ; NIEUWEBOER GERRIT GLAYMONT DEL ; NADEAU RICHARD GEORGE CLAYMONT DEL ; MO ; MCERLANE JAMES EDWARD WILMINGTON DEL ; ROTH JAMES FRANK MARYLAND HEIGHTS ; JOHNSON D US ; BOOCOCK DAVID GB ; ULLMAN E US ; CARTER E US ; DONALD R JOHNSON ; MC ERLANE J US ; NADEAU R US ; NIEUWEBOER G US ; RICHARD G NADEAU ; PIDGEON CARTERM ELBERT ; WILLIAM L TRUETT ; ELBERT P CARTER ; TRUETT WILLIAM LAWRENCE FAIRFIELD CONN ; JAMES E MCERLANE ; NIEWEBOER G
Agent(s):	EITAN PEARL LATZER AND COHEN ZEDEK
International class (IPC 8-9):	B01J27/00 B01J31/00 B01L3/00 B01L3/14 B07B11/04 B65D75/34 C07B61/00 C07C51/00 C07C51/14 C07C53/12 C07C53/126 C07C61/08 C07C67/00 C07D213/50 C07D233/02 C07D233/04 C07D233/06 C07D233/20 C07D233/22 C07D233/28 C07D235/02 C07D239/62 C07D401/06 C07F9/6506 C09K15/30 C09K3/00 C12Q1/00 G01N21/03 G01N21/25 G01N21/75 G01N31/00 G01N31/22 G01N33/48 G01N33/487 G01N33/52 G01N35/00 G01N35/02 (Advanced/Invention); B01L7/00 G01N35/04 G01N35/10 (Advanced/Non-invention); B01J27/00 B01J31/00 B01L3/00 B01L3/14 B07B11/00 B65D75/28 C07B61/00 C07C51/00 C07C51/10 C07C53/00 C07C61/00 C07C67/00 C07D213/00 C07D233/00 C07D235/00 C07D239/00 C07D401/00 C07F9/00 C09K15/00 C09K3/00 C12Q1/00 G01N21/03 G01N21/25 G01N21/75 G01N31/00 G01N31/22 G01N33/48 G01N33/487 G01N33/52 G01N35/00 G01N35/02 (Core/Invention); B01L7/00 G01N35/04 G01N35/10 (Core/Non-invention); G01N (Subclass/Invention)
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US class:	206/219 206/459.5 206/484 206/569 23/230 23/25.3R 23/253R 232/53R 250/576 252/401 252/402 252/403 260/30.9.6 260/41.3 260/413 260/533AN 356/246 356/409 422/562 422/61 422/65 422/67 422/915 422/940 435/12 435/14 435/16 435/287.6 435/288.5 435/810 436/108 436/165 436/8 436/95 502/161 502/169 502/230 526/83 530/345 530/409 534/567 534/751 536/17.4 544/243 544/302 546/274.1 548/300.7 548/302.7 548/312.7 548/313.4 548/314.4 548/314.7 548/316.7 548/334.5 548/347.1 548/355.1 549/35 549/39 549/484 549/486 552/543 552/544 552/603 554/129 554/130 556/13 556/136 556/137 556/14 556/16 556/22 556/23 556/28 556/30 556/31 556/41 558/353 560/105 560/114 560/155 560/175 560/179 560/204 560/226 560/233 562/406 562/497 562/520 562/522 564/300 564/301 568/930 568/942 568/944 987/361

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Forward Citations:	WO9961396, WO9933779, WO9916754, WO9904837, WO9614582, WO9404479, WO9312063, WO9013035, WO8904962, WO8704718, WO8606488, WO8603008, WO8600704, WO8502181, WO10088496, WO06056083, WO06041472, USRE28801, USRE28800, USD623734, US9778273, US9744506, US9708599, US9662652, US9599630, US9322835, US9229016, US9221562, US9005551, US8969086, US8936933, US8828654, US8788217, US8784745, US8784735, US8765367, US8735055, US8709814, US8673642, US8663978, US8529836, US8491178, US8480976, US8394635, US8386195, US8298815, US8257968, US8221682, US8216512, US8192992, US8178043, US8052929, US8048375, US8003050, US7960178, US7937228, US7833489, US7780336, US7767447, US7758809, US7673886, US7648678, US7635597, US7517494, US7470541, US7422892, US7400983, US7396025, US7337072, US7150995, US7150995, US6943029, US6887709, US6846298, US6827901, US6748332, US6705491, US6705490, US6562298, US6482642, US6475729, US6451606, US6388751, US6358472, US6328771, US6309890, US6287483, US6133477, US6086824, US6074617, US5989917, US5977407, US5891396,

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Abstract:
Source: US3476515A ABSTRACT OF THE DISCLOSURE
Performing analytical tests more easily, quickly and accurately by using a specially designed pouch-like **container** of pliable material. The **container** has within it a plurality of compartments, each compartment being capable of containing a different reagent and each compartment also being capable of releasing its contained reagent, independently of any other reagents present in the other compartments, into the area of the **container** not occupied by compartments. This latter area of the **container** is also adapted to receive the test sample for reaction "with any single reagent or any combination of reagents released from the compartments.



236) Family number: 22988776 (US3353328A)

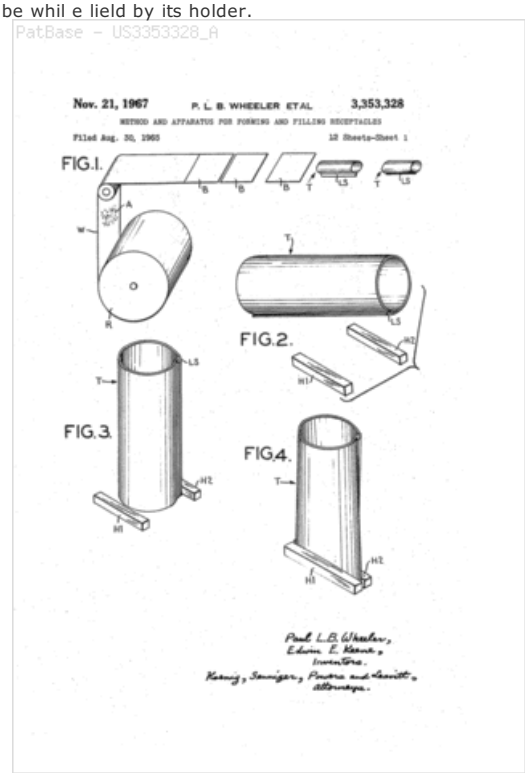
Title:	METHOD AND APPARATUS FOR FORMING AND FILLING RECEPTACLES
Priority:	US19650483403 19650830

Family:

Publication number	Publication date	Application number	Application date
US3353328 A	19671121	US19650483403	19650830

Probable Assignee:	PACKAGING FRONTIERS INC
Assignee(s):(std)**:**	PACKAGING FRONTIERS INC
Inventor(s):(std)**:**	WHEELER PAUL L B ; KEENE EDWIN E
International class (IPC 8-9):	B65B43/08 (Advanced/Invention); B65B43/00 (Core/Invention)
International class (IPC 1-7):	B65B43/08
CPC:	B65B43/08
European class:	B65B43/08
US class:	53/284 53/456 53/547 53/563
Classification Explorer	
Cited documents:	US2322430 A,
Forward Citations:	US5348062, US5347794, US5230207, US4881360, US4817366, US4813212, US4448010, US3491506, US3481110, US2005223680,

Abstract:
Source: US3353328A (Claim 1) at is claimed is: The method of Lorming, filling and **sealing** **packages** com prising forming flexible **packaging** material into openend ed tubes, closing one end Gf each tube, transferring 3o eac h tube closed at its said one end to a holder in which the tube is positioned upright with its closed end down, fillin g each tube while held by its holder through its **open** upp er end, and closi-ilg the upper end of each f!Hed tube whil e lield by its holder.



237) Family number: 386649 (US3514919A)

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Title: PACKAGING FLUIDS

Priority: FR19670107465 19670523 GB19660022884 19660523 GB19660035713 19660810

Family:

Publication number	Publication date	Application number	Application date
DE1586040 A1	19701112	DE19671586040	19670523
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NL6707117 A	19671124	NL19670007117	19670523
US3514919 A	19700602	US19670640258	19670522

Probable Assignee: REED CORRUGATED CASES LTD

Assignee(s):(std)**:** EXPRESS DAIRY CO LONDON L ; EXPRESS DAIRY CO LONDON LTD ; REED CORRUGATED CASES LTD ; EXPRESS DAIRY COMPANY LONDON L

Assignee(s): EXPRESS DAIRY COMPANY LONDON LIMITED ; EXPRESS DAIRY CO ; REED CORRUGATED CASES LIMITED

Inventor(s):(std)**:** ASHTON THOMAS RICHARD ; COTTLE VICTOR CLAUDE HERBERT ; DAVIDSON WEATHERUP WILLIAM ; HERBERT COTTLE VICTOR CLAUDE ; JACKSON DAVID ; JOHN SMITH MICHAEL ; RICHARD ASHTON THOMAS

Inventor(s): THOMAS RICHARD ASHTON ; VICTOR CLAUDE HERBERT COTTLE ; DAVID JACKSON

International class (IPC 8-9): B65B3/04 B65B55/12 (Advanced/Invention); B65B3/04 B65B55/02 (Core/Invention)

International class (IPC 1-7): B65B3/04 B65B51/30 B65B55/06 B65B55/12 B65B55/14

CPC: B65B3/045 B65B55/12

European class: B65B3/04B B65B55/12

US class: 53/210 53/425 53/469 D24/118

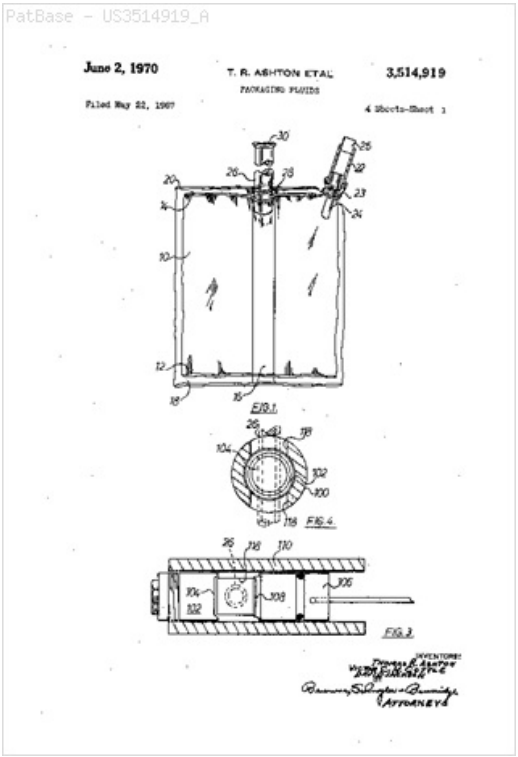
Classification Explorer

Cited documents: US3427646 A, US3422594 A, US3393491 A, US3376688 A, US3340671 A, US3325033 A, US3299606 A, US3016284 A, US2197717 A,

Forward Citations: WO9838091, WO8900947, WO14011176, WO11157705, WO11107613, WO11060292, USD509751, US9352287, US8870742, US8596308, US8591532, US8591395, US8377079, US8337389, US8233995, US8221439, US8192350, US8187163, US8187162, US8152710, US8142452, US8114345, US8100870, US8066629, US8057492, US8034065, US8016745, US8016744, US7927270, US7844342, US7775966, US7775215, US7658196, US5881535, US5382406, US5259844, US4942716, US4840017, US4836418, US4805378, US4494363, US3596429, US2011110180, FR2956974, FR2658489, EP0072699, DE3142946, CN102946909, CN102822058, CN102770199, AU607541,

Abstract:

Source: US3514919A ABSTRACT OF THE DISCLOSURE
There is disclosed methods of filling presterilized **containers** aseptically with a sterilized fluid. Each - **container** has a fflling pipe which is initially **sealed** or closed at its outer end with the **container** in an empty flattened state in which it is sterilized at least intemally. The Mling pipe is clamped closed near to its outer end and the outer end is then **opened** and attached to a filling nozzle. Sterilizing medium is then introduced into the outer end of the Mlin_ pipe. The temporary clamp is **opened** and the sterilized :ffuid filled into the **container**. Part of the pipe or con- tainer includes a portion of heat **sealable** plastics material which is then heat **sealed** to **seal** the **container** and to isolate the **container** from the filling pipe. Several forms of fflling pipe are disclosed together with forms of apparatus suitable for use in Mling **containers** with such filling pipes., B ACKGROUND OF THE INVENTION



238) Family number: 65364 (US3443093A)

© PatBase

Title: DENTAL X-RAY PACKET HAVING A UNIFORM OVERALL THICKNESS AND METHOD OF MAKING SAME

Priority: FR19670113096 19670705 US19660563532 19660707

Family:

Publication number	Publication date	Application number	Application date
BE701016 A	19671218		19670706
DE1597175 A1	19700604	DE19671597175	19670706
DE1597175 B2	19710204	DE19671597175	19670706
FR1530243 A	19680621	FR19670113096	19670705
GB1193086 A	19700528	GB19670031098	19670706
US3443093 A	19690506	US19660563532	19660707

Probable Assignee: EASTMAN KODAK CO

Assignee(s):(std)**:** EASTMAN KODAK CO

Assignee(s): EASTMAN KODAK COMPANY

Inventor(s):(std)**:** LINDENMUTH TERRY N ; LINDENMUTH TERRY NORMAN ; NORMAN LINDENMUTH TERRY ; PIERSON CHARLES W ; PIERSON CHARLES WILLIAM ; WILLIAM PIERSON CHARLES

Inventor(s): CHARLES W PIERSON ; CHARLES WILLIAM PIERSON ; TERRY N LINDENMUTH ; TERRY NORMAN LINDENMUTH

International class (IPC 8-9): G03C3/00 (Advanced/Invention); G03C3/00 (Core/Invention)

International class (IPC 1-7): B65D85/00 B65D85/48 G01N23/04 G03B42/04 G03C5/16 H01J37/22

CPC: G03C3/003

European class: G03C3/00D

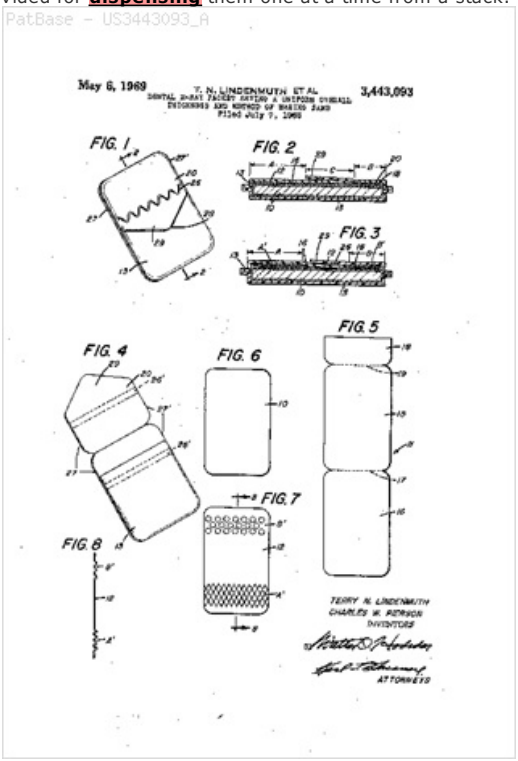
US class: 206/455 250/69 378/169

Classification Explorer

Cited documents: US3309520 A, GB566269 A, GB423809 A,

Forward Citations: WO9213293, WO10072897, US9529248, US8157443, US6755009, US6612740, US6505965, US6474864, US5924571, US5377835, US5251755, US5139148, US5077779, US5048262, US4955479, US4922511, US4912740, US4911871, US4721209, US4625325, US4119195, US4108308, US4093069, US3941246, US3714881, US2011299796, US2010072097, US2009136003, US2008017539, US2005224383, US2003024838, EP1281630, EP0383898, EP0249878, DE2803050, DE2730880, DE10317086, DE10317086,

Abstract:
Source: US3443093A ABSTRACT OF THE DISCLOSURE
Conventional dental X-ray film packs which vary in overall thickness at different portions along their length by reason of a difference in the number of layers of material resulting from the **package** structure, have the metal foil thereof knurled or embossed to different depths at the thinner portions to increase the thickness of those portions to that of the thickest portion so that the overall thickness of the entire pack is substantially the same. This improves the stacking properties of such packs and prevents them from jamming up in the discharge slots of **dispensers** provided for **dispensing** them one at a time from a stack.



239) Family number: 806914 (US3361309A)

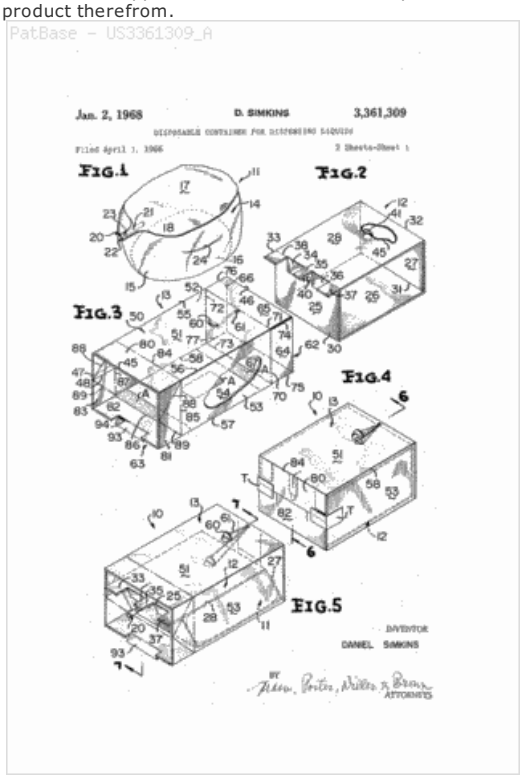
Title:	Disposable **container** for **dispensing** liquids
Priority:	US19660539524 19660401

Family:

Publication number	Publication date	Application number	Application date
US3361309 A	19680102	US19660539524	19660401

Probable Assignee:	CONTINENTAL CAN CO
Assignee(s):(std):	CONTINENTAL CAN CO
Assignee(s):	CONTINENTAL CAN COMPANY INC
Inventor(s):(std):	DANIEL SIMKINS ; SIMKINS DANIEL
International class (IPC 8-9):	B65D77/06 (Advanced/Invention); B65D77/06 (Core/Invention)
International class (IPC 1-7):	B60B39/02 B65D25/16 B65D5/60
CPC:	B65D77/065
European class:	B65D77/06B2
US class:	222/183 222/533
Classification Explorer	
Cited documents:	US3257039 A, US3233817 A, US3221943 A, US3220609 A, US3217933 A, US3191810 A, US3189228 A, US2574931 A, GB927866 A,
Forward Citations:	US6971545, US5156295, US2004245274, DE3629260,

Abstract:
Source: US3361309A (Claim 1) 1. While preferred forms and arrangement of parts have been shown in illustrating the invention, it is to be clearly understood that various changes in détails and arrangements of parts may be made without departing from the spirit and scope of the invention as defined in the ap-pended claimed subject matter. I claim: 1; A **dispensing** **container** for **dispensing** an upper strata of a flowable product by reducing the volume of the **container** upon shortening a normal non-**dispensing** linear dimension of the **container** measured between **dispensing** means at a top of the **container** and its bottom upon swinging movement of the **dispensing** means toward the bottom to a **dispensing** position, said **dispensing** **container** comprising a **container** body having top and bottom portions, means for gravity **dispensing** only an upper strata of a flowable product adapted to be housed in said body, said **dispensing** means being carried by said body and normally spaced a predetermined linear dimension from said bottom portion in a non-**dispensing** position of said **container**, and means for swinging said body and said 30 **dispensing** means from the non-**dispensing** position toward said bottom portion thereby shortening said predetermined distance, and disposing said **dispensing** means at the upper Stratum of the flowable product thereby effect-ing the gravity **dispensing** of only the upper strata of the product therefrom.



240) Family number: 30130981 (US2003145533A)

© PatBase

Title: BURIAL STRUCTURE FOR THE INTERMENT OF HUMAN REMAINS AND SIGNIFICANT MEMORABILIA

Priority: AU19660007361 19660623 US19980071923 19980501 WO1999US09615 19990430 US20040958304 20041005 US20020304156 20021125 US20010674464 20010212

Family:

Publication number	Publication date	Application number	Application date
AU199937809 A1	19991123	AU19990037809	19990430
AU736166 A1	19680104	AU19660007361D	19660623
AU736166 B2	20010726	AU19990037809	19990430
CA2330748 AA	20001101	CA19992330748	19990430
CA2330748 C	20050712	CA19992330748	19990430
US2003145533 AA	20030807	US20020304156	20021125
US2005126086 AA	20050616	US20040958304	20041005
US6052954 A	20000425	US19980071923	19980501
US6484457 BA	20021126	US20010674464	20010212
US6799399 BB	20041005	US20020304156	20021125
WO9957395 A1	19991111	WO1999US09615	19990430

Probable Assignee: PYRA DEVELOPMENT LLC

Assignee(s):(std)**:** DUDEK DANIEL T ; DUDEK P ROSE ; PYRA DEV LLC ; ROSE DUDEK P

Assignee(s): DANIEL T DUDEK ; PYRA DEVELOPMENT LLC ; P ROSE DUDEK ; HEARD PAMELA R ; HEARD PAMELA RENE ; DUDEK DANIEL THOMAS ; DUDEK P

Inventor(s):(std)**:** DUDEK DANIEL T ; DUDEK DANIEL THOMAS ; DUDEK P ROSE ; HEARD PAMELA R ; HEARD PAMELA RENE

Inventor(s): P ROSE DUDEK ; HEARD PAMELA ; DUDEK P ; DANIEL T DUDEK ; DUDEK DANIEL

Agent(s): PATENT ATTORNEY SERVICES; SEABY AND ASSOCIATES; PAUL S CZARNOTA

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZA ZW

International class (IPC 8-9): A23N4/04 A61G17/00 A61G17/08 E04B2/08 E04H13/00 (Advanced/Invention); A23N4/00 A61G17/00 E04H13/00 (Core/Invention)

International class (IPC 1-7): A61G17/00 E04B2/08 E04H13/00

CPC: A23N4/04 A61G17/007 A61G17/08 E04H13/00

European class: A23N4/04 A61G17/08 E04H13/00

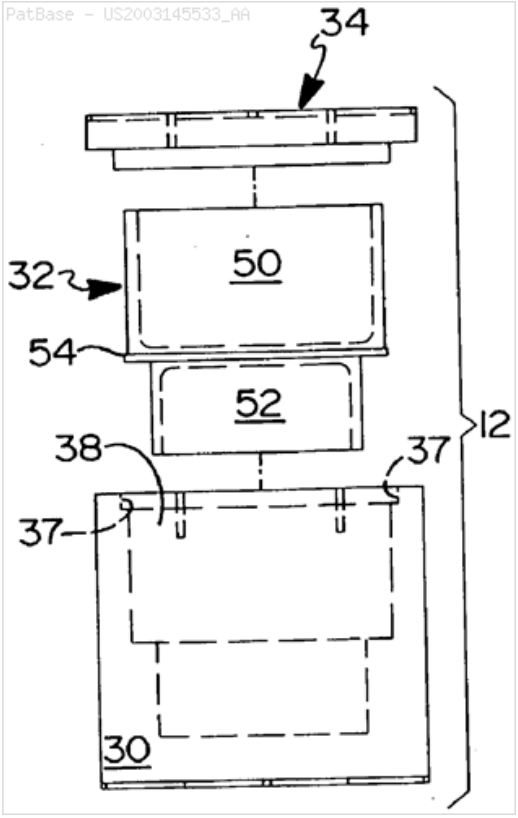
US class: 27/7 27/7S 5/213.3 5/214.1 5/223.63 5/259.26 52/128 52/128P 52/133 52/133S 52/141 52/141S 52/236.3 52/592.6 52/592.600S 52/79.1 52/791 521/280

Classification Explorer

Cited documents: USD353679, USD191829, USD191438, USD167522, US980750 A, US912368 A, US799373 A, US6484457 BA, US6370745 BA, US6324793 BA, US6318030 BA, US6052954 A, US5590446 A, US5381591 A, US5365714 A, US5301398 A, US5287603 A, US5243794 A, US5163258 A, US5081805 A, US4989382 A, US4893385 A, US481370 A, US4780994 A, US4739595 A, US4688359 A, US4671706 A, US4521999 A, US4463484 A, US4379659 A, US4277924 A, US4143494 A, US4132046 A, US4102098 A, US4073100 A, US4048772 A, US4031678 A, US3978627 A, US3958378 A, US3913741 A, US3878656 A, US3841726 A, US3839768 A, US3754805 A, US3676969 A, US3643814 A, US3642339 A, US3635354 A, US3596419 A, US3510997 A, US3486287 A, US3468081 A, US3382632 A, US3372519 A, US3350821 A, US3287865 A, US3230674 A, US304101 A, US2913895 A, US2853870 A, US2783523 A, US2708780 A, US2525017 A, US2344206 A, US2038300 A, US1981324 A, US1964234 A, US1914294 A, US1860023 A, US1858722 A, US1789099 A, US1752572 A, US1691568 A, US1585411 A, US1453375 A, US1395852 A, US1395632 A, US1340656 A, US1288254 A, US1237823 A, US1203535 A, US1110520 A, US1096758 A, US1050256 A,

Forward Citations: WO14031168, WO08142196, USD734201, USD622023, USD471690, USD471342, USD471341, USD467700, USD459566, US9464455, US9464454, US9464453, US9458643, US9249598, US9155673, US9080344, US8966725, US8898873, US8615855, US8234762, US8161694, US6799399, US6681534, US6662416, US6578323, US6520606, US6493911, US2016138292, US2015337250, US2015081595, US2015020354, US2015013124, US2014150224, US2013185907, US2011161254, US2011154748, US2010275529, US2010101158, US2010043187, US2010012606, US2009064546, US2008308439, US2008196225, US2005125973, US2003145533, US2002144471,

Abstract:
Source: US2003145533A A burial structures providing space for multiple human remains, whether in form of a body or in the form of cremens, has the additional feature of allowing interlocking of the individual **units**. Unlike previous **units**, this interlocking occurs to prohibit access to the individual cremens or bodily remains. Thus, with the exception of a main level accessway, where some cremens are located within the walls, no individual remains are directly accessible. This building feature allows the heretofore unknown ability to form the mausoleum into innovative designs and shapes, from an obelisk shape, like the pyramids of Egypt, to religious symbolisms or aesthetic shapes, thus not solely relying on landscaping for giving beauty and reverence to the mausoleum and its surroundings. Each **unit** comprises an area for the remains, and alternately an area for any memorabilia to be placed with the remains. Formed of a high-strength synthetic material, the **unit** is **sealed** with a **cover** that has grooves formed therein. The bottom of the **unit** has corresponding tongues, which effect an interlocking relationship. The sides are designed to complement and complete this arrangement. Outer blocks not containing remains are disposed around the sides and atop the structure, with the base descending into the earth, the specific depth being determined by the height of the structure and geological conditions. This structure gives lasting, beautiful and reverent surroundings for the deceased, and is kept safe from vandals and other intruders.


PatBase - US2003145533_AA
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241) Family number: 808284 (US3363147A)

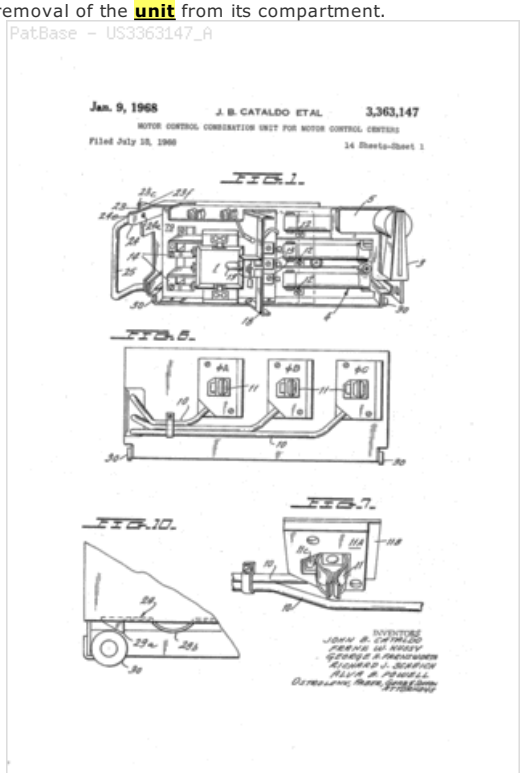
Title:	Motor control combination **unit** for motor control centers
Priority:	US19660565850 19660718

Family:

Publication number	Publication date	Application number	Application date
US3363147 A	19680109	US19660565850	19660718

Probable Assignee:	ITE CIRCUIT BREAKER LTD
Assignee(s):(std):	ITE CIRCUIT BREAKER LTD
Assignee(s):	I T E CIRCUIT BREAKER COMPANY
Inventor(s):(std):	CATALDO JOHN B ; FARNSWORTH GEORGE H ; KUSSY FRANK W ; POWELL ALVA B ; SCHEICH RICHARD J
International class (IPC 8-9):	G01R31/00 H02B1/36 (Advanced/Invention); G01R31/00 H02B1/00 (Core/Invention)
International class (IPC 1-7):	H02B11/00
CPC:	G01R31/006 H02B1/36
European class:	G01R31/00T2 H02B1/36
US class:	200/50.39 361/608 361/623
Classification Explorer	
Cited documents:	US3140426 A,
Forward Citations:	US9773633, US9368947, US8817454, US6531670, US4757169, US2016268090, US2008022673, EP0670581, DE3243060, BE1000814,

Abstract:
Source: US3363147A ABSTRACT OF THE DISCLOSURE
Motor control combination **unit** for a motor control center, wherein the individuai **Units** are stacked vertically in the motor control center; each **unit** having a number of features: each **unit** being comprised of a compartment having horizontal members defining the top and bottom of each **unit** and vertical members defining the side and rear members of the **unit**; an **openable cover** provided on the front of each **unit**; a wiring gutter extending vertically up through one side of each of the compartments; weather Stripping around the periphery of the **opening** of the front of each compartment; a motor control **unit** within each compartment, the motor control **unit** being slideable out of the **openable** front side of each compartment; motor control components connected to a support structure of which the **unit** is comprised including a control transformer, a motor starter, a motor starter disconnect means and a fuse means which may be used with the disconnect means; a rotaiable operating handle positioned to be ex-terior to the front of door of each compartment for the disconnect means; the operating handle being rotatable through an angle of 90 degrees and being mounted on a support plate positioned on the side of the compartment away from the aforementioned wiring gutter; and a plate-like support for the handle, the support having weather Stripping extending inwardly away from the periphery thereof for in-sulating the compartment door when it is closed; both the starter and disconnect means baving line terminais and load terminais on opposite sides thereof and being positioned adjacent each other; the load terminais of the starter being adjacent the wiring gutter and the line terminais of the starter facing the load terminais of the disconnect means; the transformer being positioned directly to the rear of the motor starter on the **unit** support structure; fuse clip means mounted on top of the control transformer, the control transformer having terminal means connected to the fuse clip means and the **unit** support structure having cutouts permitting access to the fuse clip means when the **unit** is partially withdrawn from its respective compartment; a pilot light connected to a pivot-ally mounted frame, whereby the light may be, alternately, positioned across the front of the support structure or pivoted away therefrom; a latch means connected with the door for preventing **opening** thereof when the operating handle is in the "on" position; each compartment having a downwardly extending lip for engaging the upper edge of the rear member of the mounting support structure be-neath it to prevent the support structure so engaged from being fully withdrawn from its compartment without tilt-ing upward of the **unit**; and a means for alternately permitting or prohibiting forvvard movement or complete removal of the **unit** from its compartment.



242) Family number: 813060 (US3369538A)

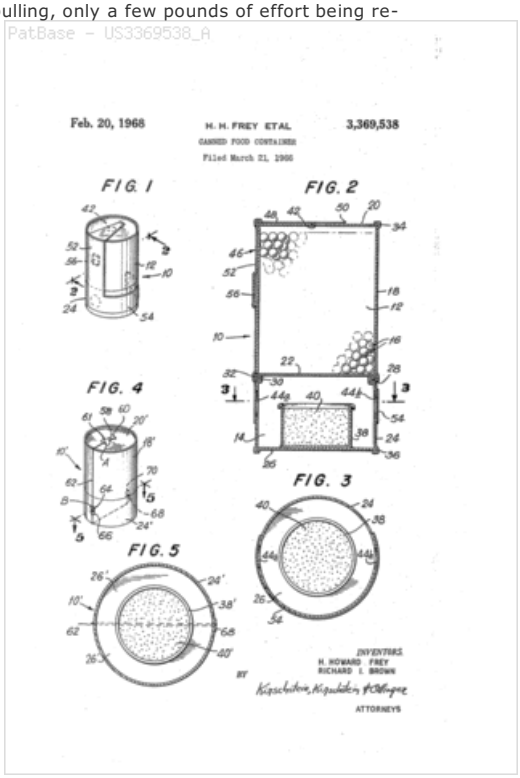
Title:	Canned food **container**
Priority:	US19660535873 19660321

Family:

Publication number	Publication date	Application number	Application date
US3369538 A	19680220	US19660535873	19660321

Probable Assignee:	FREY
Assignee(s):(std):	FREY ; HOWARD FREY H
Inventor(s):(std):	BROWN RICHARD I ; FREY H HOWARD ; HOWARD FREY H
International class (IPC 8-9):	A47J36/30 (Advanced/Invention); A47J36/24 (Core/Invention)
International class (IPC 1-7):	A47J36/26
CPC:	A47J36/30
European class:	A47J36/30
US class:	126/262
Classification Explorer	
Cited documents:	US3262445 A, US2896607 A, US2327412 A, US1325515 A, GB191424009 A, CH195922 A,
Forward Citations:	US7583194, US5568805, US5462044, US4424798, US2009289769, US2006086808, EP0028944,

Abstract:
Source: US3369538A ABSTRACT OF THE DISCLOSURE
A canned food **container** composed of a sheet metal can which is subdivided by a sheet metal transverse partition into an upper food compartment and a lower heating compartment. In the food compartment is a foodstuff including a vaporizable liquid. A jellied alcohol is disposed in the heating compartment. There is a vent **opening** in the top wall of the food compartment. There are two diametrically opposed flue vents in the side wall of the heating compartment. A single strip **covers** the vent in the top wall, runs down the side wall to **cover** one of the flue vents and then runs around the side wall to **cover** the other flue vent. The strip is secured for its entire length to the outside of the **container**, except for its free end adjacent to the vent in the top wall so that the strip only can be pulled so as to **open** the vent in the top wall before **opening** the flue vents. The strip is disconnected from the **container** without tools by manually grasping its free end and pulling, only a few pounds of effort being re-



243) Family number: 425161 (US3539355A)

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Title: COFFEE FILTER **BAG**

Priority: US19660570557 19660805 US19670649557 19670628

Family:

Publication number	Publication date	Application number	Application date
DE1654971 A1	19710401	DE19671654971	19670804
GB1145100 A	19690312	GB19670035392	19670801
US3370524 A	19680227	US19660570557	19660805
US3539355 A	19701110	US19670649557	19670628

Probable Assignee: SAM KASAKOFF

Assignee(s):(std)**:** KASAKOFF SAM ; SAM KASAKOFF

Inventor(s):(std)**:** SAM KASAKOFF ; KASAKOFF SAM

International class (IPC 8-9): A47G19/16 A47J31/06 B65D81/00 B65D85/812 (Advanced/Invention); A47G19/00 A47J31/06 B65D81/00 B65D85/804 (Core/Invention)

International class (IPC 1-7): A47G19/16 A47J31/06 A47J31/08 B65B29/02 B65D33/00 B65D81/34

CPC: B65D85/812 A47G19/16 A47J31/0636

European class: A47G19/16 A47J31/06K B65D81/00B1A B65D85/812

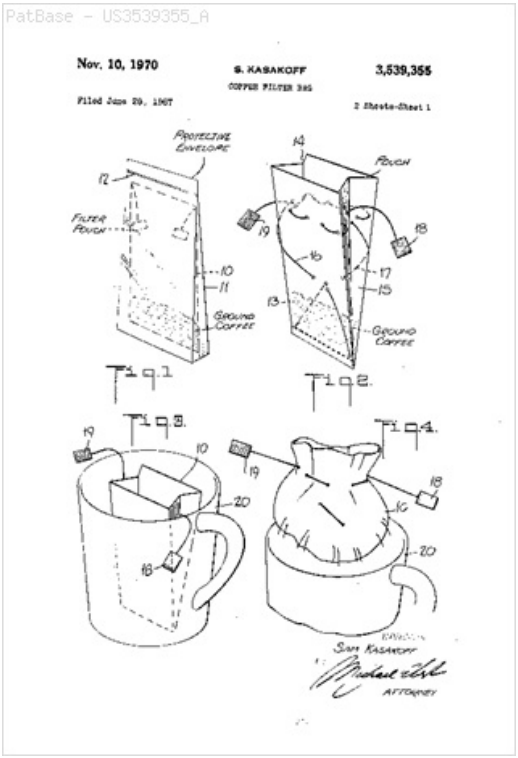
US class: 426/77 426/80 99/287 99/77.1 992/870

Classification Explorer

Cited documents: US3279926 A, US3215533 A, US2925171 A, US2881910 A, US2805164 A, US2285113 A, US1462610 A, US1440047 A, US1281984 A,

Forward Citations: WO9319997, WO9206903, WO09132648, WO05065093, WO05065093, USD768355, USD699917, USD689257, US8337918, US8012523, US7235273, US6844015, US6038963, US5979144, US5878550, US5863575, US5855938, US5806408, US5674544, US5632132, US5552165, US5552164, US5478586, US5358724, US5132124, US4735810, US4726956, US4680185, US4619830, US4551336, US4417433, US4290521, US3906847, US3616934, US2011014326, US2010083840, US2009246324, US2007108136, US2006222738, US2006169150, US2006169149, US2005279220, US2005092185, US2005054259, US2004118295, US2004091580, TR28328, SG86304, JP51110076, JP49071282, GB2419805, GB2279642, GB2279642, GB2224264, EP2966008, EP0741988, EP0679354, EP0583210, EP0094368, DE3202386, DE29601442, DE102014010070, DE10013700, CN102343995,

Abstract:
Source: GB1145100A 1,145,100. Infusers. S. KASAKOFF. 1 Aug., 1967 [5 Aug., 1966], No. 35392/67. Heading A4D. A coffee infuser comprises an opentopped filter **bag** of paper or cellulosic material having high wet strength fitted with gussets 14 and 15, and a pair of drawstrings 16 and 17 threaded diagonally up and then across the mouth of the **bag**, the strings terminating in pull **tags** 18 and 19. In use the filter **bag** containing ground coffee is removed from the outer hermetically **sealed** envelope, placed with its mouth **open** in a suitable receptable, and boiling water poured into it. After about half a minute the mouth of the **bag** is closed by pulling **tags** 18 and 19, and by continuing to pull the said **tags** the **bag** contracts as the base thereof is forced towards the mouth and the trapped water is forced out of the pores of the filter. The drawstrings need not be threaded into the **bag** but may be attached thereto by staples or instead of the drawstrings the filter **bag** may be held within an **open** mesh structure which is capable of contraction when threads thereof are pulled. In another embodiment the drawstrings are replaced by a stiff paper strap, stapled to the bottom of he **bag**, have a broad-band half-section (22) providing a first **tab** 22A and a narrowband half-section (23) forming a **tab** 23A, which is bent over the **closure** flap 10A and admitted through slot 228 in the broad-band section, whereby the two halves of the strap encircle the **bag** and when the **tabs** are pulled cause the **bag** to contract. In a further embodiment a pair of parallel wires or other deformable means, secured to opposite sides of the mouth of the **bag**, are rotated causing the body of the **bag** to wind about the wires thus reducing the dimensions of the **bag** and subjecting the water therein to pressure.



244) Family number: 365413 (US3371827A)

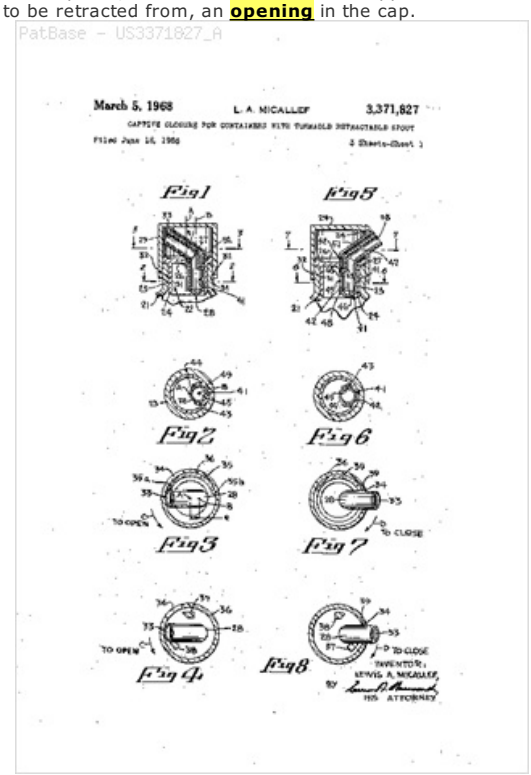
Title:	Captive **closure** for **containers** with turnable retractable spout
Priority:	FR19670110519 19670615 US19660558047 19660616

Family:

Publication number	Publication date	Application number	Application date
DE1607877 A1	19700827	DE1967L056754	19670615
DE1607877 B2	19761223	DE1967L056754	19670615
DE1607877 C3	19770811	DE1967L056754	19670615
FR1529031 A	19680614	FR19670110519	19670615
GB1165418 A	19691001	GB19670026153	19670606
US3371827 A	19680305	US19660558047	19660616

Probable Assignee:	LEEDS AND MICALLEF
Assignee(s):(std):	LEEDS AND MICALLEF ; LEEDS WALTER ; LEWIS AUGUSTUS MICALLEF
Assignee(s):	WALTER LEEDS
Inventor(s):(std):	A MICALLEF LEWIS ; MICALLEF LEWIS A
International class (IPC 8-9):	B65D47/20 B65D47/22 B65D47/26 B65D83/16 (Advanced/Invention); B65D47/04 B65D83/16 (Core/Invention)
International class (IPC 1-7):	B65D25/46 B65D35/48 B65D47/22 B65D47/26 B65D47/32 B65D83/14
CPC:	B65D47/2012 B65D47/263 B65D83/206 B65D2101/003
European class:	B65D47/20D B65D47/26D2 B65D83/20C2 L65D101/00A3B
US class:	222/507 222/536 222/541.6
Classification Explorer	
Cited documents:	US3245588 A, US3094255 A, US2990980 A, US2979238 A, US2762537 A, US1079710 A,
Forward Citations:	WO9014897, WO8900958, US9302827, US7857174, US7156266, US7097078, US6757957, US6622895, US6615473, US6394323, US6357625, US6311878, US6241128, US6059154, US6041975, US5918777, US5337918, US5203841, US5090601, US5085347, US5016783, US4998649, US4938393, US4852762, US4836423, US4779773, US4241855, US4207996, US3847313, US2017036226, US2014103070, US2008116232, US2006032872, US2004050871, KR101269409, FR2836902, FR2553738, EP2765089, EP1352689, EP0601487, EP0301135, EP0087562, DE8814473, DE3215287, DE1930906,

Abstract:
Source: US3371827A ABSTRACT OF THE DISCLOSURE
A **dispensing** cap, for a **container**, includes a rotatable valved spout and a cap and, when the cap is turned in opposite directions, the spout is cam moved to project through and, respectively, to be retracted from, an **opening** in the cap.



245) Family number: 23083086 (GB1104895A)

Title:	IMPROVED METHOD OF AND APPARATUS FOR PRODUCING AND CLOSING **BAG** PACKINGS
Priority:	GB19650052800 19651213

Family:

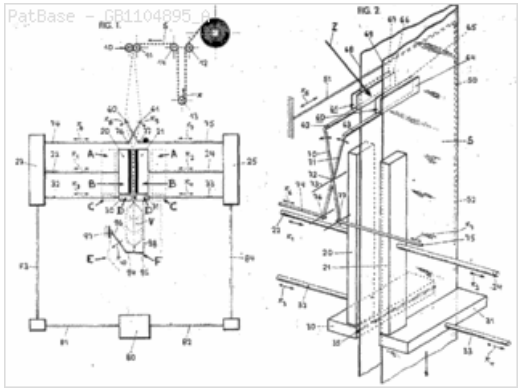
Publication number	Publication date	Application number	Application date
GB1104895 A	19680306	GB19650052800	19651213

Probable Assignee:	WICKERSHEIM AUGUST KG
Assignee(s):(std)**:**	WICKERSHEIM AUGUST KG ; WICKERSHEIM KG AUGUST
Assignee(s):	AUGUST WICKERSHEIM KG
Inventor(s):(std)**:**	WICKERSHEIM AUGUST
International class (IPC 8-9):	B65B9/08 B65B9/093 (Advanced/Invention); B65B9/06 (Core/Invention)
International class (IPC 1-7):	B65B9/08
CPC:	B65B9/093
European class:	B65B9/08 B65B9/093

Classification Explorer

Forward Citations: CN103588016,

Abstract:
Source: GB1104895A 1,104,895. **Packaging**-machines. AUGUST WICKERSHEIM K.G. 13 Dec., 1965, No. 52800/65. Heading B8C. [Also in Division B5] A method of producing and closing **packages** comprises the steps of advancing a length of longitudinally folded material S over a vertical guide 50, heat-**sealing** the material along a transverse and longitudinal seam, **opening** the top of the **package** by expanding fingers 60, 61 to assist filling of the **package**, further advancing the **package** and heat-**sealing** its upper transverse seam whilst simultaneously parting the **package** from the web of material. The web S of preferably plastics material is fed between rolls 10-14 and **sealing** jaws 20, 21 and 30, 31. Jaw 21 is spring-loaded and when the transverse and longitudinal **seals** have been formed; the expanding fingers 60, 61 **open** the top of the **package** to allow it to be filled. The operation of the jaws and fingers is controlled by devices 23, 25 connected via linkages 81-84 to a common drive 80. After advancing the filled **package**, its top is **sealed**, this **seal** also forming the bottom **seal** of a second **package**. Plates 96, 98 support the **package** during this operation. Air jets cool the transverse weld, whilst water circulating in the hollow vertical jaws 20, 21 cools the longitudinal weld. A resistance wire 35 mounted in the jaw 31 parts one **package** from the next along the middle of the transverse **seal**.



246) Family number: 19288927 (US3802470A)

Title:	COMPOSITE **CONTAINER** AND METHOD OF HANDLING FLUENT MATERIALS
Priority:	US19660599070 19661205 US19710158592 19710630

Family:

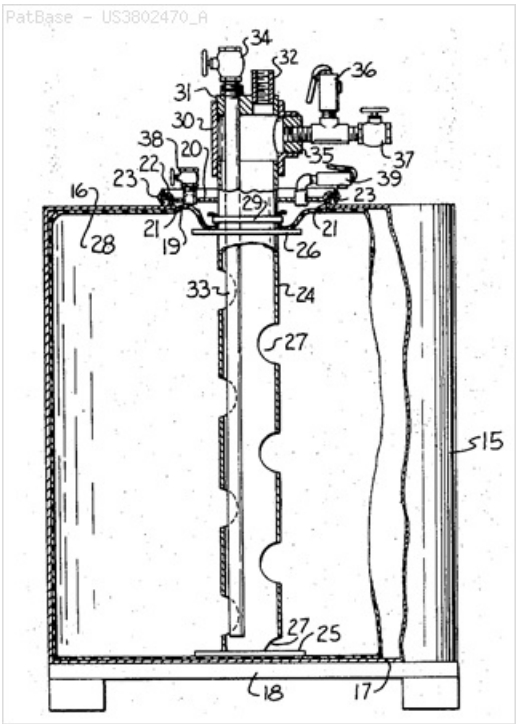
Publication number	Publication date	Application number	Application date
BE707429 A	19680401		19671201
DE1586562 A1	19700212	DE19671586562	19671201
DE6607910 U	19710513	DE19660007910U	19671201
ES347437 A1	19690201	ES19670347437	19671121
FR1557748 A	19690221		19671129
GB1190593 A	19700506	GB19670031650	19670710
NL6716481 A	19680606	NL19670016481	19671204
US3590888 A	19710706	US19660599070	19661205
US3802470 A	19740409	US19710158592	19710630

Probable Assignee:	BUYER COLEMAN
Assignee(s):(std):	BUYER COLEMAN ; BUYER COLEMAN CLARENCE ; CLARENCE B COLEMAN ; COLEMAN C ; COLEMAN CLARENCE BUYER ; COLEMAN CLARENCE BAYER
Assignee(s):	COLEMAN C US ; CLARENCE BAYER COLEMAN
Inventor(s):(std):	BUYER COLEMAN CLARENCE ; COLEMAN C ; COLEMAN CLARENCE B ; COLEMAN CLARENCE BAYER
Inventor(s):	COLEMAN CLARENCE BUYER ; COLEMAN C US ; CLARENCE B COLEMAN ; CLARENCE BAYER COLEMAN
International class (IPC 8-9):	B65D88/62 (Advanced/Invention); B65D88/00 (Core/Invention)
International class (IPC 1-7):	B65B3/00 B65B3/04 B65D25/14 B65D25/16 B65D47/00 B65D87/34 B65D90/04 B67C3/00 B67C3/30 B67C3/32
CPC:	B65D88/62
European class:	B65D88/62
US class:	141/10 141/313 141/48 141/5 141/69 220/62.21 222/1 222/95

Classification Explorer

Cited documents:	US3377766 A, US3371822 A, US3159306 A, US3097677 A, US3086683 A, US3083875 A, US3068561 A, US2989213 A, US2987216 A, US2916058 A, US2811178 A, US2564163 A, GB708813 A, GB648863 A, FR66802 E, DE1511824 A1, DE1144649 B,
Forward Citations:	WO9734804, WO9303980, WO8203832, USRE43418, USD765469, US9637300, US9522773, US9211993, US9168497, US9156670, US9120616, US8887959, US8366311, US8336734, US8162164, US7506776, US7475796, US7431494, US7188644, US7066215, US7065940, US6843285, US6598631, US6536484, US6328183, US6009685, US5706872, US5553749, US5411179, US5339989, US5302029, US5183086, US5115943, US5076471, US5072857, US5056571, US4996760, US4960227, US4901886, US4886190, US4796788, US4635814, US4256150, US4091952, US4044912, US4001450, US3945534, US3902624, US3797538, US3692070, US2015305255, US2014326752, US2014034671, US2013163371, US2013001245, US2010133292, US2010025430, US2010015696, US2009323466, US2009130757, US2009053107, US2008257893, US2008031082, US2007193649, US2007113923, US2007071590, US2006277783, US2006186117, US2006180605, US2005279207, US2005224523, US2004116903, US2003196723, US2002091596, US2002083995, GB2183737, GB2172261, GB2148995, GB2146611, FR2939419, EP1820750, EP1820750, EP1352852, EP0456403, EP0034025, CN102627247, BE1005606,

Abstract:
Source: US3802470A A composite **container** is assembled by introducing a flexible **bag**, in collapsed condition, into a rigid shell through an **opening** therein and distending the **bag** for all-around support by the shell by injecting inflation gas through a multi-passage conduit extending through the shell and **bag openings**; fluent material to be confined is thereafter admitted to the **bag** while simultaneously exhausting displaced gas through the same conduit means. The material can be discharged through the nozzle means by pumping or by forcing gas into the space between the shell and **bag** to collapse the **bag**; or a separate **opening** can be formed in the bottom of the **bag**. The two passages may end at the conduit means, and at least one communicates directly with an upper part of the **bag** to discharge displaced gas. The conduit means has a plate or bar to position the bottom of the **bag** within the shell.



247) Family number: 29381831 (US3437195A)

Title: PACKAGING

Priority: FR19670122569 19670928 US19660583503 19660929 US19670583503 19670824 US19670672409 19670824

Family:

Publication number	Publication date	Application number	Application date
DE1586813 B1	19720309	DE19671586813	19670928
DE1786527 A1	19720803	DE19671786527	19670928
FR1547608 A	19681129	FR19670122569	19670928
GB1207177 A	19700930	GB19670044301	19670928
NL6713075 A	19680401	NL19670013075	19670926
US3437195 A	19690408	US19670002409	19670824

Probable Assignee: 3M CO

Assignee(s):(std)**:** 3M CO ; MINNESOTA MINING AND MFG

Assignee(s): MINNESOTA MINING AND MFG CO ; MINNESOTA MINING AND MANUFACTURING CO ; MINNESOTA MINING AND MANUFACTURING COMPANY

Inventor(s):(std)**:** HILL RALPH L ; LEONARD HILL RALPH

Inventor(s): RALPH L HILL

International class (IPC 8-9): B65D75/54 B65D77/02 B65D81/00 B65D85/671 B65D85/672 (Advanced/Invention); B65D75/52 B65D77/00 B65D81/00 B65D85/67 (Core/Invention)

International class (IPC 1-7): B64D29/06 B65B55/00 B65D79/00 B65D81/32 B65D85/66 B65D85/67

CPC: B65D75/54 B65D77/02 B65D81/00 B65D85/671 B65D85/672

European class: B65D75/54 B65D77/02 B65D81/00 B65D85/671 B65D85/672

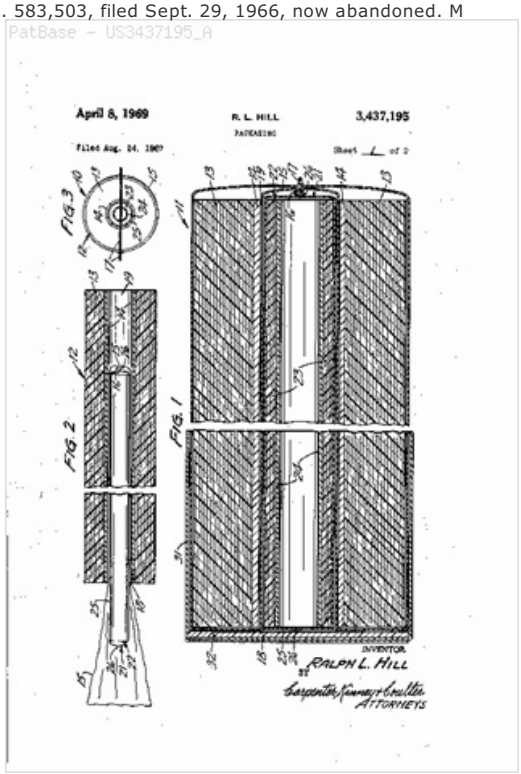
US class: 206/226 206/303 206/391 206/47 53/409 53/434

Classification Explorer

Cited documents: US3261458 A, US3224586 A, US3202276 A, US3112824 A, US3054505 A, US2814382 A, US2673432 A, US2658613 A, US2345190 A, DE1815738 U, DE1683358 U,

Forward Citations: WO9829309, US7717266, US5782058, US5709068, US5634317, US4346738, US3987897, US3670876, US2007163909, CN104495085,

Abstract:
Source: US3437195A ABSTRACT OF THE DISCLOSURE
A hermetically **sealed** **package** comprising a first elongate annular article hermetically **sealed** in a plastic wrapper and a compositionally identical second elongate article hermetically **sealed** in a plastic wrapper and disposed within the central cavity of the first article. The configuration of the **package** is such that the second article can be readily removed from the **package** for testing purposes without destroying the hermetic **seal** of the first article; also, a method for producing the hermetically **sealed** **package**. This is a continuation-in-part of my application Ser. No. 583,503, filed Sept. 29, 1966, now abandoned. M



248) Family number: 30991806 (US4183442A)

Title: CONTAINER CLOSURE HAVING PULL-TAB OPENING MEANS

Priority: FR19670125080 19671019 NO19670170163 19671017 NO19700000920 19700313 US19660589018 19661024

Family:

Publication number	Publication date	Application number	Application date
BE705366 A	19680419		19671019
BR6794082 A0	19730308	BR19670194082	19671023
CH500107 A	19701215	CH19670014859	19671024
DE1607844 A1	19700827	DE1967C043578	19671016
DE1607844 C3	19791220	DE1967C043578	19671016
DE6609021 U	19720203	DE19660009021U	19671016
DK124069 B	19720911	DK19670005265	19671023
ES346188 A1	19681201	ES19670346188	19671018
FR1541443 A	19681004	FR19670125080	19671019
GB1138919 A	19690101	GB19670046254	19671010
GR34698 B	19680611	GR19670134698	19671017
LU54715 A	19680508		19671023
NL155501 B	19780116	NL19670014399	19671024
NL6714399 A	19680425	NL19670014399	19671024
NO118831 B	19700216	NO19670170163	19671017
NO121434 B	19710222	NO19700000920	19700313
SE342198 B	19720131	SE19670014486	19671023
US3428211 A	19690218		19661024
US4183442 A	19800115	US19660589018	19661024

Probable Assignee: CROWN CORK AND SEAL CO

Assignee(s):(std)**:** CROWN CORK AND SEAL COM INC ; CROWN CROK AND SEAL CO INC ; CROWN CROK AND SEAL COMPANY INC ; CROWN CORK E SEAL CO ; CROWN CORK AND SEAL CO

Assignee(s): CROWN CORK AND SEAL CO INC ; CROWN CORK AND SEAL CO INC PHILADELPHIA PA V ST A ; CROWN CORK AND SEAL COMPANY INC PHILADELPHIA PENNSYLVANIA VER ST V AM ; CROWN CORK AND SEAL COMINC ; CROWN CORK AND SEAL COMPANY INC ; CROWN CORK AND SEAL COMPANY INC PHILADELPHIA PENNS

Inventor(s):(std)**:** F SCHARF JERRY ; J LOHR WILLIAM ; JERRY F SCHARF ; LOHR WILLIAM JOSEPH ; POTTS V ; POTTS VINSON S ; POTTS VINSON SIRROLL ; S POTTS VINSON ; SCHARF J ; SCHARF JERRY F ; LOHR W ; LOHR WILLIAM J ; SCHARF JERRY FRANCIS ; VINSON S POTTS ; WILLIAM J LOHR ; SOHB W ; SHARF J

Inventor(s): WILLIAM JOSEPH LOHR ; VINSON SIRROLL POTTS ; LOHR WILLIAM J PHILADELPHIA ; SCHARF JERRY F HAVERTOWN ; POTTS VINSON S CHERRY HILL N J ; JERRY FRANCIS SCHARF

International class (IPC 8-9): B65D17/34 B65D41/32 B65D47/36 (Advanced/Invention); B65D17/28 B65D41/32 B65D47/00 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1-7): B65D17/20 B65D17/24 B65D17/34 B65D41/32 B65D47/36 B65D7/04

CPC: B65D17/4011

European class: B65D17/16B1

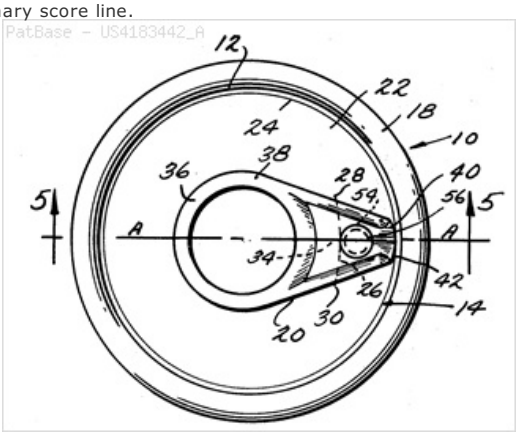
US class: 220/271 220/273 220/54

Classification Explorer

Cited documents: US3338463 A, US3326406 A, US3322296 A, US3301432 A,

Forward Citations: USD701121, USD556036, USD549098, USD530603, US3938696, DE3110770,

Abstract:
Source: US4183442A A container closure having a tear strip opener wherein the removable panel which is defined by a primary score line includes a secondary score line and a pull tab which is secured to the removable panel at the collar portion formed by the primary and secondary score lines. The pull tab extends transversely with respect to the primary and secondary score lines and a lifting of the free end of the tab will rupture the secondary score line and initiate rupture of the primary score line and twist the collar portion to facilitate subsequent rupture of the primary score line.



249) Family number: 820358 (US3379333A)

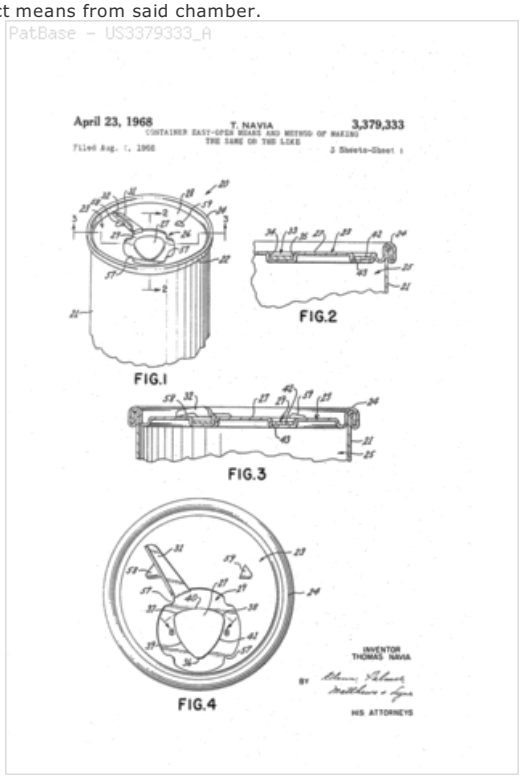
Title:	**CONTAINER** EASY-**OPEN** MEANS AND METHOD OF MAKING THE SAME OR THE LIKE
Priority:	US19660570625 19660805

Family:

Publication number	Publication date	Application number	Application date
US3379333 A	19680423	US19660570625	19660805

Probable Assignee:	REYNOLDS METALS CO
Assignee(s):(std)**:**	REYNOLDS METALS CO
Assignee(s):	REYNOLDS METALS COMPANY
Inventor(s):(std)**:**	THOMAS NAVIA ; NAVIA THOMAS
International class (IPC 8-9):	B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)
International class (IPC 1-7):	B65D17/34
CPC:	B65D17/4012
European class:	B65D17/16B2
US class:	220/267 220/47 222/541.6 D9/438
Classification Explorer	
Cited documents:	US3160325 A, US3160309 A,
Forward Citations:	USD419448, US4625886, US3912128, US3888384, US3877604, US3726432, US3661306, US3529750,

Abstract:
Source: US3379333A (Claim 1) 1. A conlainer having wall means defining a chamber therein for cont-,iining product means, said wall means having an **openable** portion, and **opening** means movably carried by said wall n-leans and havin.- edge means cooperable wilh said **openable** portion to separate at least part of said opeiiable portion from said wall means upon movement of said **opening** means from one position thereof to anot_er position thereof whereby said separated part of said openab!e portion deflnes an **opening** through said wall means for **dispensing** _aid product means from said chamber.



250) Family number: 821595 (US3381068A)

Title:	THERMOFORMING AND SCORING METHOD AND APPARATUS
Priority:	US19650468726 19650701

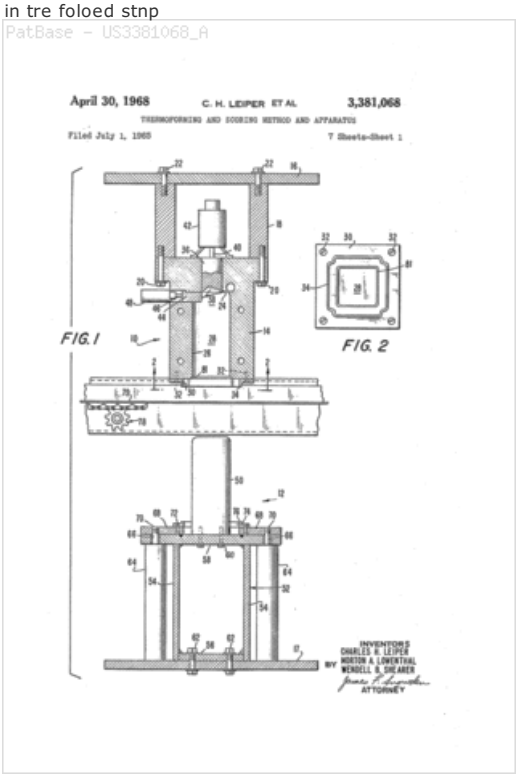
Family:

Publication number	Publication date	Application number	Application date
US3381068 A	19680430	US19650468726	19650701

Probable Assignee:	MOBIL OIL CORP
Assignee(s):(std):	MOBIL OIL ; MOBIL OIL CORP
Inventor(s):(std):	LEIPER CHARLES H ; LOWENTHAL MORTON A ; SHEARER WENDELL B
International class (IPC 8-9):	B29C51/34 (Advanced/Invention); B29C51/30 (Core/Invention)
International class (IPC 1-7):	B29C17/03
CPC:	Y10S425/058 B29C51/34
European class:	B29C51/34
US class:	264/296 264/318 264/550 264/89 425/304 425/324.1 425/355 425/388 425/405.1 425/DIG.58
Classification Explorer	
Cited documents:	US3234310 A, US3214797 A, US3058153 A, US3004285 A, US2991500 A, US2666951 A, US1744026 A, CH373171 A, CH373171,
Forward Citations:	US8883067, US5456593, US5425471, US5368467, US5314324, US5250246, US5034178, US4230662, US3695804, US2012168988, US2003146543,

Abstract:

Source: US3381068A ABSTRACT OF THE DISCLOSURE
A process and apparatus for \acuuni foimmg plastic sheet mafTifl into a **container** boay ha/ng an integral clo are hd connected tnere vith by a folded and scored tear str p in wmch the beat-softened sheet is intidlv shaped in a deep mo'd cavitj containing an extended plunger for shaping an undercut secssion of the article and a retracted resi"pmg plunger usng a plug assisss in comb nat on with vacuum and commessed air wmle the sheet is clampea outs'de the penpnery oe the cavity at distances spaced to regul ts the amo int of s^eet material dra y-_gt; mto the mold cvjfy for stretching mto an article of uniform \vall thickness, then the îeshapmg pkmger is ad/^ncea to peel materia' away from part of the mold c iif"ce while s'Jl m a plastic condition m forming a foldea strip rou id pEit of t! e **closure** of the article and to score a groove in tre foloed stnp



251) Family number: 30164282 (US3421654A)

Title: CLOSING **COVER** MADE OF PLASTIC

Priority: AT19680007400 19680730 CH19670013318 19670922 DE1967SC40136 19670214 DE1968SC41992 19680217 DE1967SC40231 19670214

Family:

Publication number	Publication date	Application number	Application date
AT278563 B	19700210	AT19670008581	19670921
AT287528 B	19710125	AT19680007400	19680730
BE708187 A	19680502		19671219
CH471007 A	19690415	CH19670013318	19670922
CH495749 A	19700915	CH19680002017	19680212
DE1607925 A1	19700924	DE19671607925	19670125
DE1607925 B2	19741114	DE19671607925	19670125
DE1607925 C3	19760108	DE19671607925	19670125
DE1657162 A1	19720224	DE19681657162	19680217
GB1186662 A	19700402	GB19680003281	19680122
NL6801169 A	19680726	NL19680001169	19680125
US3421654 A	19690114	US19680699671	19680122

Probable Assignee: SCHMALBACH LUBECA

Assignee(s):(std)**:** SCHMALBACH LUBECA ; SCHWARZKOPF D ; SCHWARZKOPF FA HANS ; SCHWARZKOPF GMBH HANS ; SCHWARZKOPF HANS FA

Assignee(s): SCHMALBACH LUBECA GMBH 3300 BRAUNSCHWEIG ; SCHMALBACH LUBECA WERKE AG ; SCHMALBACH LUBECA WERKE AKTIENGESELLSCHAFT ; FIRMA HANS SCHWARZKOPF

Inventor(s):(std)**:** BOELLERT V ; BOELLERT VOLKER DIPL CHEM DR ; BOELLERT VOLKER DR ; GALLE F ; GALLE FRIEDHELM DIPL CHEM DR ; GALLE FRIEDHELM DR ; GERTRUD MUELLER ; HEXEL DIPL ING GUENTER ; HEXEL GUENTER DIPL ING ; HEXEL GUNTER KARL FRIEDRICH ; LUKESCH H ; LUKESCH HEINZ DIPL CHEM DR ; LUKESCH HEINZ DR ; MUELLER G ; MUELLER GEB MEYER GERTRUD ; RANDEBROCK R ; RANDEBROCK RUDOLF DIPL CHEM DR ; RANDEBROCK RUDOLF DR ; RAPPEN L ; RAPPEN LUDWIG DIPL CHEM DR ; RAPPEN LUDWIG DR

Inventor(s): MUELLER GERTRUD ; HEXEL GUENTER DIPL ING 3300 BRAUNSCHWEIG ; HEXEL DIPL INGGUENTER ; GUNTER KARL FRIEDRICH HEXEL

International class (IPC 8-9): A61K35/12 A61K8/49 A61Q5/00 A61Q5/02 A61Q5/12 B65D21/032 B65D21/036 B65D39/16 B65D43/10 B65D43/16 B65D47/08 B65D47/36 B65D51/28 C11D1/00 C11D3/48 (Advanced/Invention); A61K8/30 A61Q5/02 A61Q5/12 B65D21/032 B65D39/00 B65D43/16 B65D47/00 B65D47/08 B65D51/24 (Core/Invention); A61K (Subclass/Invention)

International class (IPC 1-7): A01N9/00 A61K31/47 A61K35/12 A61K7/00 B65D17/02 B65D17/06 B65D17/16 B65D21/04 B65D3/10 B65D39/16 B65D41/32 B65D43/10 B65D43/16 B65D47/08 B65D47/36

CPC: B65D47/36 B65D43/161 A61Q5/12 A61K8/4926 A61Q5/006 A61Q5/02 B65D51/28

European class: A61K7/06C14B A61K8/49C4 A61Q5/00F A61Q5/02 A61Q5/12 B65D43/16A B65D47/36 B65D51/28

US class: 206/508 220/254.3 220/60 220/780 220/792 220/837 D9/435

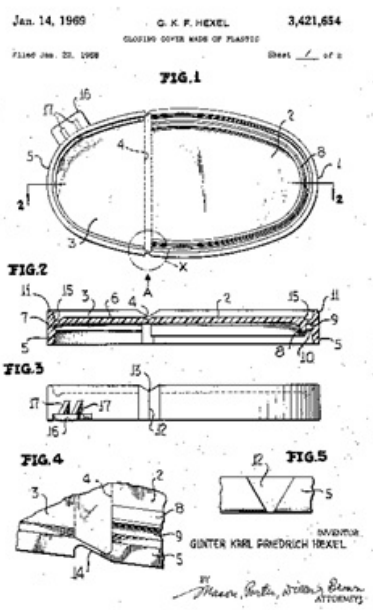
Classification Explorer

Cited documents: US3322299 A, US3223275 A,

Forward Citations: WO9535245, WO10065980, WO0144058, WO0144058, USD803676, USD720613, USD717162, USD706131, USD680426, USD667262, USD662818, USD662817, USD661543, USD653495, USD641208, USD639656, USD639186, USD638701, USD636218, USD635817, USD635816, USD610903, USD594328, USD572587, USD568739, USD531499, USD531032, USD530204, USD529803, USD451022, USD451019, USD447382, USD446077, USD444679, USD443825, USD443471, US9815607, US9676539, US9622605, US9505542, US9493277, US9260228, US9211030, US9181009, US9132951, US9078535, US9038845, US9027825, US8973776, US8939312, US8919594, US8919592, US8887918, US8870010, US8866056, US8850964, US8789718, US8757429, US8720726, US8714393, US8708181, US8695845, US8613249, US8590730, US8528736, US8523016, US8517212, US8511500, US8485360, US8479942, US8302528, US8261935, US8215514, US8091242, US7963421, US7963416, US7845514, US7775395, US7134569, US6910623, US6817480, US6712233, US6672817, US6523713, US6279788, US6119890, US5697509, US5636732, US5452820, US5447247, US5203467, US5139164, US5125525, US5110002, US5036994, US4991717, US4900160, US4428497, US3994411, US3977559, US3904074, US3893566, US3815585, US3756448, US3519163, US3512673, US2013146598, US2013056476, US2012080399, US2011200716, US2011024462, US2010102074, US2010059537, US2009142455, US2009078125, US2008264947, US2008217346, US2008210686, US2008072432, US2007181008, US2007116807, US2007116806, US2007090103, US2007045140, US2006124643, US2005236465, US2005194391, US2005189367, US2005145626, US2004195239, US2002134783, KR101532760, GB2374066, GB2259088, EP2025614, EP1250264, EP1250264, EP1240084, EP0004075, EP0004075, DE9301039, DE4326114, CN102292270, AU2008365185,

Abstract:
Source: GB1186662A 1,186,662. **Container** **closures**. SCHMALBACH-LUBECA-WERKE A.G. 22 Jan., 1968 [25 Jan., 1967], No. 3281/68. Headings B8D and B8T. A **closure** 1, for a **container** having a mouth defined by an outwardly directed rim, is made of plastics material and comprises a crown, which consists of two portions connected by a hinge 4, and an outer skirt 5 having weakened areas 12 at each end of the hinge. The crown portion 2 which stays attached to the **container**, has an inner skirt 8 which combines with under. cut 7 to form a recess 9, whilst movable crown portion 3 has a lug 16 and fins 17 to facilitate **opening**. On **opening** the weakened areas tear to leave visible indication after reclosing. Web 11 and groove 15 enable **container** **closure** assemblies to be stacked on each other, Fig. 7 (not shown). Lugs, hooks or the like may be provided on the outer skirt for affixing selling aids and may have weakened areas to permit their removal. Reference has -been directed by the Comptroller to Specification 1,084,025.

PatBase - US3421654_A



252) Family number: 153899 (US3456861A)

© PatBase

Title: PACKAGE COMPRISING A THIN BAG AND A DOUBLE-FOLDED STIFFENING INSERTED INTO THE BODY OF THE BAG,AND THE PROCEDURE FOR THE PRODUCTION OF THIS PACKAGE

Priority: SE19660015062 19661103

Family:

Publication number	Publication date	Application number	Application date
CH481795 A	19691130	CH19670015417	19671103
DE1586460 B1	19710422	DE19671586460	19671102
DK116985 B	19700302	DK19670005473	19671102
ES346740 A1	19690316	ES19670346740	19671103
FR1551109 A	19681227		19671102
GB1191295 A	19700513	GB19670048802	19671026
NL160219 B	19790515	NL19670015000	19671103
NL160219 C	19791015	NL19670015000	19671103
NL6715000 A	19680506	NL19670015000	19671103
SE359508 B	19730903	SE19660015062	19661103
US3456861 A	19690722	US19670008259	19671026

Probable Assignee: TETRA PAK INT

Assignee(s):(std)**:** TETRA PAK AB ; TETRA PAK INT ; TETRA PAK INT AB ; TETRA PAK INTERNAT AB

Assignee(s): TETRA PAK INTERNATIONAL AB LUND ZWEDEN ; A B TETRA PAK ; AB TETRA PAK ; TETRA PAK INT AB SW ; TETRA PAK INTERNATIONAL AB

Inventor(s):(std)**:** MALTE ROLAND WETTLEN LARS ; WETTLEN LARS MALTE ROLAND ; WETTLEN L ; WETTEEN ROLAND ; MALTE LARS

Inventor(s): LARS MALTE ROLAND WETTLEN ; WETTLEN L SW ; ROLAND WETTLEN LARS MALTE

International class (IPC 8-9): B65D5/06 C09B67/20 (Advanced/Invention); B65D5/02 C09B67/00 (Core/Invention)

International class (IPC 1-7): B31B7/60 B35D5/60 B65D5/02 B65D5/10 B65D5/40 B65D5/56 B65D5/60 B65D5/70 B65D5/72 B65D5/74 B65D77/06 B65D85/00 B65D85/80

CPC: B65B5/04 B65B9/20 B65B39/007 B65D5/068 C09B67/0061

European class: B65B39/00C B65B5/04 B65B9/20 B65D5/06D1 C09B67/00N2

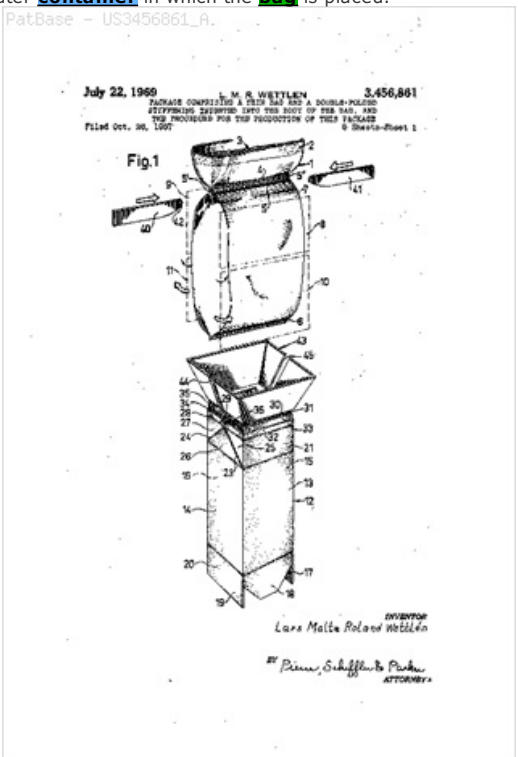
US class: 229/117.27 229/17 229/214 229/249 53/449 53/451 53/452

Classification Explorer

Cited documents: US3215330 A, US2214944 A, GB965078 A, BE630258 A,

Forward Citations: WO04094273, WO04094273, US8720769, US4891929, US4636391, US4571926, US4355493, US4174598, US4099665, US3983682, US2013047555, US2004187445, FR2459175, FR2347278, DE4006305, DE2637794, DE2351189,

Abstract:
Source: US3456861A ABSTRACT OF THE DISCLOSURE
A package made from a tube of thin flexible material and having transversely extending end seals includes a tucked-in portion adjacent one corner portion of one of the sealed ends and in which none of the four walls of the bag developed at the tuck are sealed to one another. A W-shaped stiffening member has its central wedge-shaped portion inserted into the tuck and the four surface parts of the W are adhered respectively to the four wall portions of the bag defining the tuck. The bag is opened automatically at the corner portion where the tuck is located by spreading apart the W-shaped stiffening member and the walls of the tuck which thereby results in a progressive rupture of the end seal from the package corner. The W-shaped stiffening member is incorporated in the walls which form the gable top end of an outer container in which the bag is placed.



253) Family number: 920935 (US3385506A)

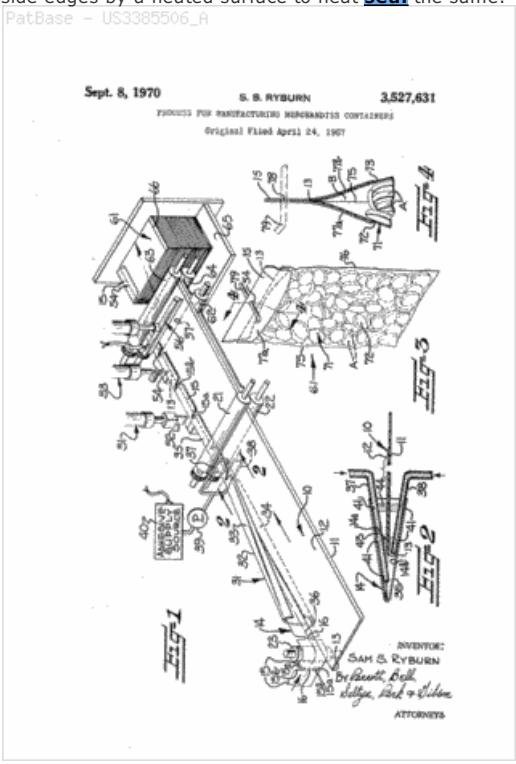
Title:	Merchandise **container**
Priority:	US19670633221 19670424 US19680701626 19680130

Family:

Publication number	Publication date	Application number	Application date
US3385506 A	19680528	US19670633221	19670424
US3527631 A	19700908	US19680701626	19680130

Probable Assignee:	PACKAGE PRODUCTS CO INC
Assignee(s):(std):	PACKAGE PRODUCTS CO INC ; PACKAGE PRODUCTS COMPANY INC
Inventor(s):(std):	RYBURN SAM S
Inventor(s):	SAM S RYBURN
International class (IPC 8-9):	B31B19/90 B65D75/52 (Advanced/Invention); B31B19/00 B65D75/52 (Core/Invention)
International class (IPC 1-7):	B31B23/00 B31F1/00 B31F5/08 B65D6/00
CPC:	B65D75/52 Y10T156/1011 Y10T156/1034 Y10T156/1054 Y10T156/1084 B31B70/8123 B31B70/00 B31B2160/10
European class:	B31B19/90 B65D75/52 L31B219/90B3
US class:	156/202 156/216 156/251 156/269 206/459.5 229/53 383/22 383/29 383/30 493/226 53/419
Classification Explorer	
Cited documents:	US3328220 A, US3255871 A, US3166457 A, US3148598 A, US3142436 A, US3016983 A, US2721023 A, US2620120 A, US2480500 A,
Forward Citations:	US7419555, US7380664, US7077796, US6974512, US6880310, US5338382, US4606784, US4292033, US4282055, US4278488, US4253562, US2006068156, US2006051553, US2006043037, US2004221551, US2004192529, US2004190796, US2004079466, US2003071413, EP0079095,

Abstract:
Source: US3385506A ABSTRACT OF THE DISCLOSURE
A **container** for merchandise comprising a **bag**-like main body of heat-**sealable** thermoplastic material having a display **label** secured to a closed end thereof and having an. **open** end opposite thereto for the insertion of merchandise articles therein; and wherein side edges of the **bags** are joined by heat **sealing** and wherein the side edges of the display **label** attached thereto are inset from the side edges of the **bag** to permit unrestricted contact of the side edges by a heated surface to heat **seal** the same.



254) Family number: 23075107 (GB1117541A)

Title:	Internal membrane material discharging device for **containers**
Priority:	GB19650045283 19651026

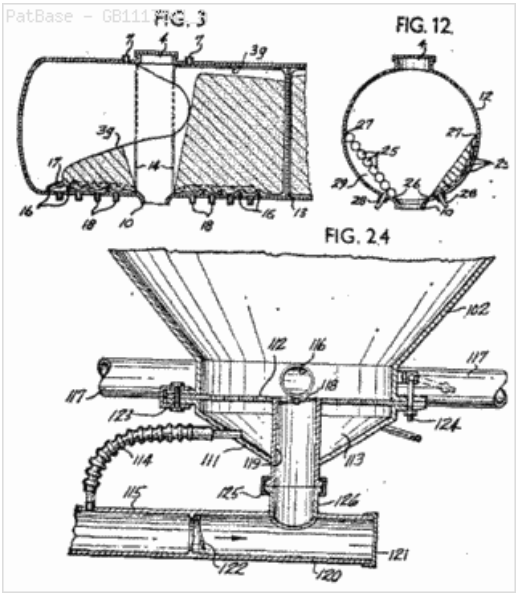
Family:

Publication number	Publication date	Application number	Application date
GB1117541 A	19680619	GB19650045283	19651026

Probable Assignee:	HAMILTON NEIL KING PATON
Assignee(s):(std):	HAMILTON NEIL KING PATON
International class (IPC 8-9):	B60P3/24 (Advanced/Invention); B60P3/22 (Core/Invention)
International class (IPC 1-7):	B60P3/24
CPC:	B60P3/246
European class:	B60P3/24B

Classification Explorer

Abstract:
Source: GB1117541A 1,117,541. Tank wagons; road tank vehicles; ships carrying bulk cargo. H. N. K. PATON. 26 Oct., 1965, No. 45283/65. Headings B7A, B7B and B7L. [Also in Division B8] Unloading mechanism for a horizontally elongated **container** holding particulate material, which may be a static **container** or mounted on a road or rail vehicle or a ship has a cup shaped flexible membrane of less than half the length of the **container** which by differential pressure or its two sides can invert to sweep the material towards an outlet in the bottom of the **container** to one side of the membrane which it then overlies. Membrane sections 3g can be held against the **container** walls during filling by suction applied to **openings** 7 while the filler **opening** 4, is vented or pressurized while the pressures can be reversed periodically to cause the membrane to embrace and compact the material. During discharge suction can be applied to the discharge **opening** 10 while the **openings** 7 are vented or pressurized but to prevent the membrane from **covering** the **opening** 10 before the material is discharged the inversion of the membrane can be controlled as by suction or pressure appliedto **opening** 18 between ribs 16, 17 adjacent the **opening** 10 or by magnetic elements or by controlled stiffening of appropriate areas. The membranes on either side of the **openings** 4, 10 may be operated alternately and more than one operation may be necessary to complete discharge. To control insect infestation during **storage** inert gas may be introduced under pressure into the material. The membrane acts as an insulation for the material and prevents contamination by condensation on the inside of a metal **container**. Material may be moved towards the discharge **opening** 10 by means such as inflatable tubes 25, Fig. 12, which under pressure move from the side of the **container** to a chordal position thus moving the material. The discharge **opening** may be elongated lengthwise of the **container** or the material moving arrangements may dump the material in a lengthwise trough containing a screw or belt conveyer, or vibrating or fluidizing means may be provided adjacent the discharge **opening**. Alternatively discharge hoppers, Fig. 24 may be provided comprising a gas supply pipe which by a connection 114 supplies gas to a plenum chamber 113 for discharging material through an outlet pipe 116 of a conveying pipe 117 or by actuating a valve 118 allowing discharge through a continuation 120 of the pipe 115. The membrane in addition to being **sealed** to the sides of the **container** has to be **sealed** around the filling **opening** and various **seals** are described including means mechanically operated to lock the **cover** in **open** or closed position to prevent material getting between the membrane and **container**.



255) Family number: 16008 (US3389827A)

Title: EASY-**OPEN** **CONTAINER** AND **SEALING** TAPE

Priority: US19670629515 19670410

Family:

Publication number	Publication date	Application number	Application date
AT293261 B	19710927	AT19680003493	19680409
AU3612768 A1	19691016	AU19680036127	19680408
CH483967 A	19700115	CH19680005347	19680409
DE1757179 A1	19711223	DE19681757179	19680409
DE1757179 B2	19780622	DE19681757179	19680409
DE1757179 C3	19790215	DE19681757179	19680409
ES352231 A1	19691216	ES19680352231	19680330
FR1569867 A	19690606		19680409
GB1231442 A	19710512		19680409
IL29795 A0	19680620	IL19680029795	19680409
IL29795 A1	19710825	IL19680029795	19680409
SE355191 B	19730409	SE19680004796	19680409
US3389827 A	19680625	US19670629515	19670410

Probable Assignee: 3M CO

Assignee(s):(std)**:** MINNESOTA MINING AND MFG

Assignee(s): MINNESOTA MINING AND MFG CO ; MINNESOTA MINING AND MFG CO US ; 3M CO ; MINNESOTA MINING AND MANUFACTURING CO ; MINNESOTA MINING AND MANUFACTURING CO SAINT PAUL MINN V ST A ; MINNESOTA MINING AND MANUFACTURING COMPANY

Inventor(s):(std)**:** ABERE JOSEPH F ; BROCHMAN WILFRED R ; REINHOLTZ BROCHMAN WILFRED R ; FRANCIS ABERE JOSEPH F ; BROCHMAN W ; ABERE J ; R BROCHMAN WILFRED ; F ABERE JOSEPH

Inventor(s): JOSEPH FRANCIS ABERE AND WILFRED REINHOLTZ BRUCHMAN ; WILFRED R BROCHMAN ; SAINT PAUL MINN ; JOSEPH F ABERE ; BROCHMAN W US ; ABERE J US

Agent(s): REINHOLD COHN AND PARTNERS

International class (IPC 8-9): B65B51/06 B65B61/18 B65D17/50 B65D53/08 B65D8/02 B65D8/20 C09J7/02 (Advanced/Invention); B65D17/00 B65D53/00 B65D8/00 B65D8/04 C09J7/02 (Core/Invention)

International class (IPC 1-7): B65D17/06 B65D17/12 B65D17/14 B65D17/16 B65D17/20 B65D17/50 B65D53/08 B65D8/02 B67B5/00 C09F5/00 C09J5/00 C09J7/02 C09K

CPC: B65D17/28 B65D17/505 B65D17/502 B65D2517/0013 B65D2517/0061 B65D2517/5005 B65D2517/5035 B65D2517/5083

European class: B65D17/16 B65D17/50A1 B65D17/50A3 L65D517/00Y2B L65D517/00Y7A1 L65D517/50M1 L65D517/50M10B1 L65D517/50Q5

US class: 220/359.1 220/53

Classification Explorer

Cited documents: US3355059 A, US3339788 A, US3312368 A, US3292828 A, US3251515 A, US2870935 A,

Forward Citations: WO9911187, WO9838955, WO9421207, WO17087225, WO17083482, WO17083166, WO17079073, WO17079071, WO17004231, WO16160541, WO16109420, WO16109418, WO16100153, WO16100021, WO16053875, WO15179235, WO15134250, WO15130608, WO15130550, WO15102981, WO15050749, WO15020882, WO15013093, WO14149718, WO14099404, WO14081626, WO14036347, WO14014504, WO13162680, WO13090191, WO13009725, WO12092343, WO12092121, WO10147930, WO10117612, WO08107323, WO04073567, WO02089906, USRE33893, USRE33727, USD804678, USD804677, USD767138, USD702839, USD701609, USD698029, USD688373, USD686329, USD643928, USD627469, USD611156, USD604423, USD602590, USD590949, USD578651, USD573260, USD559985, USD495419, USD473947, US9839560, US9783699, US9777407, US9750652, US9611572, US9604031, US9592161, US9572962, US9572942, US9562174, US9561134, US9555167, US9487893, US9457169, US9457123, US9452087, US9441079, US9416485, US9278155, US9242022, US9194065, US9168180, US9119620, US8932704, US8858986, US8721943, US8696975, US8636763, US8617199, US8609131, US8581017, US8513322, US8490818, US8410332, US8372051, US8232332, US8167162, US8110718, US8105353, US8084665, US8012295, US7981949, US7910790, US7858838, US7838718, US7781639, US7781041, US7659323, US7612248, US7598298, US7563941, US7518031, US7511185, US7473719, US7459489, US7442849, US7414168, US7384984, US7354446, US7342047, US7335690, US7332641, US7276247, US7191911, US7111749, US7074839, US7030288, US7005143, US6903243, US6867342, US6838589, US6731965, US6716186, US6709716, US6708050, US6701172, US6685682, US6607799, US6566575, US6489534, US6461467, US6436432, US6420622, US6364113, US6356779, US6264976, US6232366, US6221198, US6169224, US6149614, US6129971, US6045920, US6018092, US6015603, US5858516, US5827184, US5738642, US5736228, US5728502, US5673433, US5660925, US5660922, US5637368, US5616385, US5599602, US5593750, US5589122, US5538444, US5531855, US5514442, US5454739, US5433992, US5407368, US5012946, US5004111, US4967740, US4934544, US4817816, US4781323, US4730769, US4562936, US4557398, US4473168, US4454956, US4373978, US4372460, US4125665, US3990603, US3896965, US3883034, US3666138, US3632461, US2012228339, US2011315703, US2011220649, US2011189463, US2011185666, US2011166594, US2011166492, US2011151738, US2011151737, US2011151000, US2011118646, US2011112492, US2011106030, US2010318052, US2010295219, US2010286639, US2010266794, US2010113860, US2010106121, US2010106113, US2010089924, US2010030179, US2009326498, US2009290279, US2009223981, US2009187130, US2009177136, US2009062711, US2008300339, US2008200890, US2008142023, US2008119599, US2008039759, US2007275042, US2007191752, US2007156075, US2007038246, US2007010777, US2006292209, US2006186147, US2006167180, US2006165999, US2006165762, US2006142687, US2006111656, US2006058721, US2006039982, US2005249791, US2005194559, US2005192370, US2005139597, US2005131148, US2005130527, US2005113733, US2005080453, US2005070688, US2005033215, US2005021083, US2005021082, US2005021081, US2005020957, US2005020956, US2004247655, US2004247654, US2004162512, US2004133143, US2004076721, US2003203011, US2003165652, US2003007999, US2002128578, US2002082540, FR2334573, EP3050545, EP2907387, EP2581066, EP2462956, EP2366366, EP2353559, EP2353558, EP2258325, EP2177185, EP1970218, EP1897566, EP1737503, EP1494727, EP0788338, DE2849756, DE2655632, DE2444616,

Abstract:
Source: US3389827A ABSTRACT OF THE DISCLOSURE
Easy-**open** **containers** having a **dispensing** **opening** **sealed** with pressure-sensitive tape or tape having short term characteristics of pressure-sensitive tape, and tapes therefore having adhesive coatings including cross-linked neoprenes, acrylates, and tackified block copolymers.

PatBase - US3389827_A

June 25, 1968 J. F. ABENE ET AL 3,389,827

EASY-OPEN CONTAINER AND SEALING TAPE

Filed April 10, 1967

FIG. 1



FIG. 2



FIG. 3



INVENTORS
WILFRED R. BROCHMAN
JOSEPH F. ABENE
BY Laporte, Sinnott & Sutton
ATTORNEYS

256) Family number: 829538 (US3391821A)

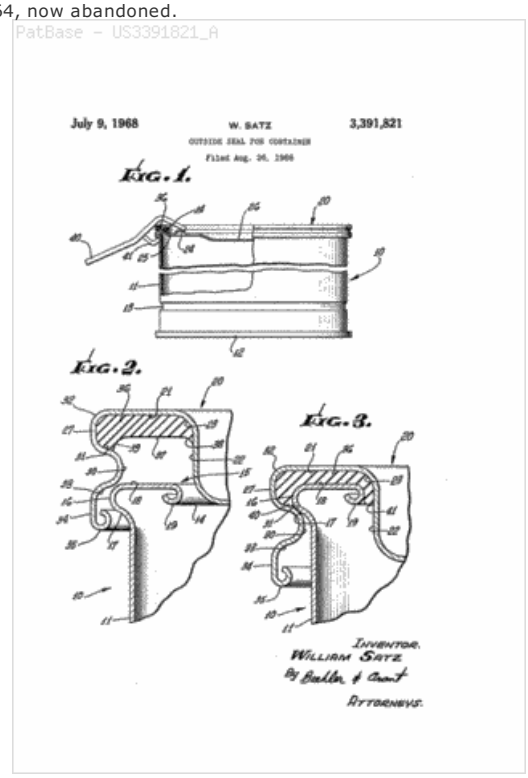
Title:	Outside **seal** for **container**
Priority:	US19660575277 19660826

Family:

Publication number	Publication date	Application number	Application date
US3391821 A	19680709	US19660575277	19660826

Probable Assignee:	WILLIAM SATZ
Assignee(s):	WILLIAM SATZ
Inventor(s):(std):	SATZ WILLIAM ; WILLIAM SATZ
International class (IPC 8-9):	B65D43/02 (Advanced/Invention); B65D43/02 (Core/Invention)
CPC:	B65D43/0212 B65D2543/00092 B65D2543/00277 B65D2543/00509 B65D2543/00537 B65D2543/00555 B65D2543/0062 B65D2543/00685 B65D2543/00731 B65D2543/00796 B65D2543/00888 B65D2543/00972
European class:	B65D43/02S3E L65D543/00Y10E L65D543/00Y1F2C L65D543/00Y1M4 L65D543/00Y20B1 L65D543/00Y8D1C L65D543/00Y8D3 L65D543/00Y8D5 L65D543/00Y8S1B2 L65D543/00Y8S1D2 L65D543/00Y8S3B2 L65D543/00Y8S3D2
US class:	220/284 220/60 220/795
Classification Explorer	
Cited documents:	US3211323 A, US3101864 A,
Forward Citations:	US4846366, US4291817, US2017081095, US2016052680, US2009223988, US2008006657,

Abstract:
Source: US3391821A ABSTRACT OF THE DISCLOSURE
The invention resides in a **sealed** **package** consisting of a **container** and **closure** therefor having complementary **sealing** surfaces with a resilient **sealing** material on the **sealing** surface of the **closure**. On the rim of the **container** is an outwardly convex annular cam which is engaged by an inwardly convex annular cam on the **closure**, the inwardly convex cam forming a portion of the pocket which contains the resilient **sealing** material. There is additionally provided a skirt on the **closure** adjacent the cam which has a rounded beaded edge giving the edge of the **closure** a premanent breadth, the rounded headed edge being spaced from the wall of the **container** in closed position so that it can be grasped by either the fingers or a tool for removal of the **closure**. This is a continuation-in-part of application, Ser. No. 338,822, filed Jan. 20, 1964, now Patent No. 3,268,106, which in turn is a continuation-in-part of applications, Ser. No. 90,119, filed Feb. 17, 1961, and Ser. No. 268,230, filed Mar. 27, 1963 (now abandoned), and of application, Ser. No. 384,825, filed July 24, 1964, now abandoned.



257) Family number: 957933 (US3480019A)

© PatBase

Title: ROLLER,CLIP AND COMPOSITION OF MATTER

Priority: FR19670090389 19670109 US19660551320 19660519 US19660591939 19660906 US19670616548 19670216 US19680695043 19680102 US19670693432 19671226 US19690846182 19690730

Family:

Publication number	Publication date	Application number	Application date
BR6804874 A0	19730125	BR19680204874	19681216
BR6804875 A0	19730125	BR19680204875	19681216
CH459480 A	19680715	CH19670000367	19670111
CH477840 A	19690915	CH19680002242	19680215
DE1557333 A1	19720127	DE19661557333	19661231
DE1632472 A1	19711118	DE19681632472	19680319
DE1632472 C3	19730208	DE1968P044284	19680319
DE1757175 A1	19720727	DE19681757175	19680408
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GB1225183 A	19710317		19680216
GB1225184 A	19710317		19680216
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JP50001185 B4	19750116	JP19680075201	19681016
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NL6807970 A	19690630	NL19680007970	19680606
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US3480019 A	19691125		19671226
US3493722 A	19700203		19680102
US3587595 A	19710628	US19690846182	19690730

Probable Assignee: POPEIL BROTHERS

Assignee(s):(std)**:** POPEIL S ; POPEIL SAMUEL J ; POPEIL BROTHERS ; POPEIL SAMUEL JOSEPH

Assignee(s): SAMUEL JOSEPH POPEIL CHICAGO ILLINOIS VER ST V AM ; POPEIL BROTHERS INC ; SAMUEL J POPEIL ; SAMUEL JOSEPH POPEIL

Inventor(s):(std)**:** SAMUEL JOSEPH POPEIL ; POPEIL SAMUEL JOSEPH ; POPEIL SAMUEL J ; POPEIL S ; JOSEPH POPEIL SAMUEL

Inventor(s): SAMUEL J POPEIL

International class (IPC 8-9): A45D2/12 A45D4/16 A45D6/14 A61H33/12 F24H1/18 (Advanced/Invention); A45D2/00 A45D4/00 A45D6/00 A61H33/06 F24H1/18 (Core/Invention)

International class (IPC 1-7): A45D2/12 A45D2/14 A45D2/16 A45D2/32 A45D4/10 A45D4/16 A45D8/00 A61H33/06 A61H33/12 A61M11/04 A61M15/00 H05B3/60

CPC: A45D4/16 A45D6/14 A61H33/12 A45D2/122

European class: A45D2/12F A45D4/16 A45D6/14 A61H33/12

US class: 132/229 132/242 132/248 132/252 132/273 132/40 132/46 219/222 219/401 219/474 392/333 392/336 4/537 422/300 607/84 D28/38

Classification Explorer

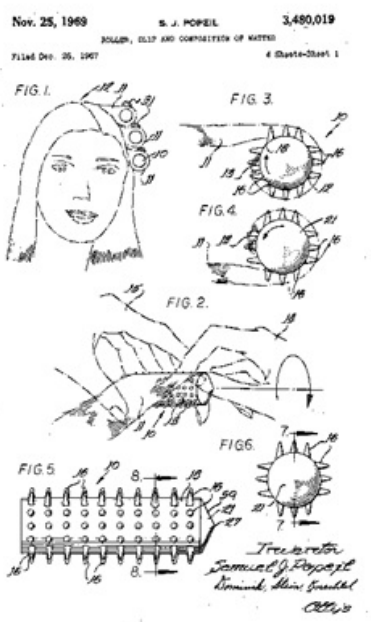
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Forward Citations: WO9746133, WO0003915, WO0003915, USD640411, US7067771, US6830055, US6523549, US6243533, US6101317, US6047704, US6035099, US5938693, US5819762, US5715846, US5715360, US5692315, US5660192, US5618457, US5558107, US5538021, US5522408, US5441707, US5384103, US5355591, US5286949, US5285800, US5228213, US4860775, US4832040, US4816644, US4621641, US4516011, US4372477, US4343321, US4284091, US4190052, US3931827, US3881500, US3754116, US3739787, US3700853, US3666915, US3656490, US3654428, US3646316, US3614381, US3600552, US3566887, US2016309545, US2016227899, US2014352084, US2008041411, US2005274330, JP61036043, GB2253786, GB2253786, GB2166950, GB2160418, FR2643797, ES2127064, EP1607079, EP1607079, EP1384465, EP0909135, EP0385881, DE4321432, DE3643786, DE3406065, DE2823770, DE2141209, DE2130704,

Abstract:

Source: US3480019A ABSTRACT OF THE DISCLOSURE
Improved hair rollers and clips for securing the same, the rollers having a hollow body portion with a plurality of spines extending radially therefrom. The clips have a circular **open** ended body portion having two legs extending therefrom, and a looped **tab** on the body portion to provide orientation and resiliency. The rollers are used for setting the hair by heating, preferably by steaming, the hollow rollers, rolling the hair over the rollers, and securing by clips the rolled strands of hair to the rollers until the rollers have transferred their moisture and heat to the hair thereby setting the curl. This application constitutes a continuation-in-part of earlier filed applications, Ser. No. 551,320, filed on May 19, 1966 and Ser. No. 591,939, abandoned, filed on Sept.

PatBase - US3480019_A



258) Family number: 638583 (US3531644A)

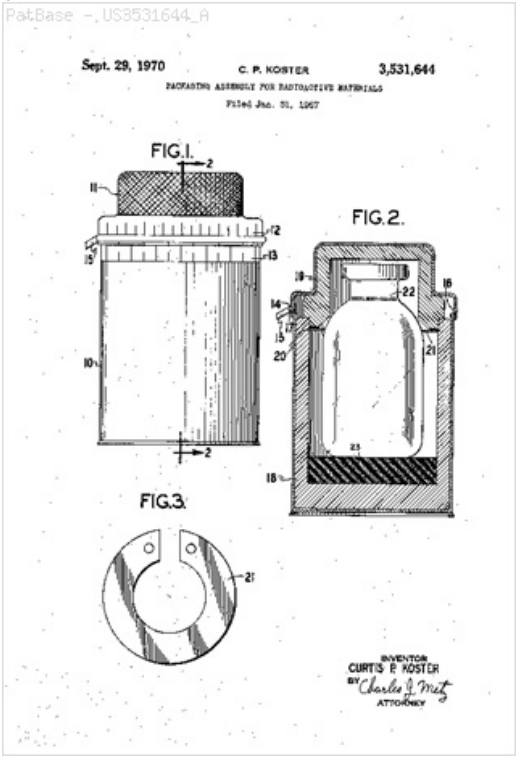
Title:	**PACKAGING** ASSEMBLY FOR RADIOACTIVE MATERIALS
Priority:	US19670612871 19670131

Family:

Publication number	Publication date	Application number	Application date
FR1557174 A	19690214		19680131
GB1142987 A	19690212	GB19680004729	19680130
NL6801420 A	19680801	NL19680001420	19680131
US3531644 A	19700929	US19670612871	19670131

Probable Assignee:	MALLINCKRODT INC
Assignee(s):(std):	MALLINCKRODT CHEMICAL WORKS ; UNION CARBIDE CORP
Assignee(s):	MALLINCKRODT CHEM WORKS ; MALLINCKRODT INC
Inventor(s):(std):	KOSTER CURTIS P
Inventor(s):	CURTIS P KOSTER
International class (IPC 8-9):	G21F5/015 (Advanced/Invention); G21F5/00 (Core/Invention)
International class (IPC 1-7):	G01J1/42 G21F5/00 G21F9/22
CPC:	G21F5/015
European class:	G21F5/015
US class:	206/209 206/523 250/106 250/428 250/506.1 250/507.1 976/DIG.350
Classification Explorer	
Cited documents:	US3256441 A, US2915640 A, US2810839 A, US2648254 A, US2587147 A,
Forward Citations:	WO9525331, WO14164444, WO14105971, USRE36693, USD783410, USD488864, US9757306, US9327886, US9324466, US9233776, US9004281, US8633461, US8513632, US8362452, US8288744, US8281923, US8269201, US8251221, US8003967, US7918010, US7918009, US7772565, US7692173, US7495246, US7268359, US7264121, US7165672, US7086133, US7040856, US7019317, US6722499, US6576918, US6425174, US5944190, US5927351, US5834788, US5828073, US5672883, US5552612, US5536945, US5519931, US5397902, US5164160, US4923088, US4880119, US4869299, US4846235, US4788438, US4712618, US4698510, US4627956, US4560069, US4197467, US4081688, US4022317, US3971955, US3882315, US3770964, US2011215267, US2011215266, US2011215265, US2011215264, US2011139643, US2009302499, US2009294700, US2008197302, US2008091164, US2007108205, US2007034537, US2006289807, US2005247893, US2005234424, US2005224730, US2004016098, US2003222228, US2003217947, CN104870048,

Abstract:
Source: US3531644A ABSTRACT OF THE DISCLOSURE
A **packaging** assembly for radioactive materials having an outer **container** and cap, an inner radioactive shielding receptacle and cap, and a vessel retained within the réceptacle for radioactive material.



259) Family number: 1328373 (US3574864A)

Title: DISPOSABLE HOSPITAL PATIENT{3 S GOWN WITH COHESIVE

Priority: CA19690049340 19690422 CA19720148255 19720731 US19660584322 19660927 US19660534903 19660316 US19710107289 19710118 US19690828407 19690312

Family:

Publication number	Publication date	Application number	Application date
CA917852 A1	19730102	CA19690049340	19690422
CA960401 A1	19750107	CA19720148255	19720731
CA960401 A2	19750107	CA19720148255	19720731
CH538260 A	19730815	CH19700003608	19700311
DE1920615 A1	19710304	DE19691920615	19690423
DE1920615 B2	19750612	DE19691920615	19690423
DE1920615 C3	19760205	DE19691920615	19690423
GB1261091 A	19720119	GB19690020425	19690422
JP54020898 B4	19790726	JP19690040116	19690524
US3399406 A	19680903	US19660584322	19660927
US3451062 A	19690624	US19660534903	19660316
US3574864 A	19710413	US19690828407	19690312
US3745587 A	19730717	US19710107289	19710118

Probable Assignee: BRADLEY M D THEODORE

Assignee(s):(std)**:** BRADLEY M D THEODORE ; BRADLEY T ; BRADLEY THEODORE ; BRADLEY THEODORE DR ; CALIF ; THEODORE BRADLEY

Assignee(s): BRADLEY THEODORE MONTEREY CALIF V ST A ; BRADLEY T US ; BRADLEY MD THEODORE

Inventor(s):(std)**:** BRADLEY T ; BRADLEY THEODORE ; BRADLEY THEODORE DR ; THEODORE BRADLEY ; THEODORE BRADLEY M D

Inventor(s): THEODORE BRADLEY MD ; BRADLEY THEODORE MONTEREY CALIF V ST A ; BRADLEY T US

International class (IPC 8-9): A41D13/12 C09J7/02 (Advanced/Invention); A41D13/12 C09J7/02 (Core/Invention)

International class (IPC 1-7): A41B9/00 A41D13/00 A41D13/12 A41D9/00 A41H43/00 A61B19/06 C09J7/02

CPC: A41D13/129 A41D2400/52 A41D13/1236 Y10T428/24017

European class: A41D13/12C A41D13/12D K41D400/52

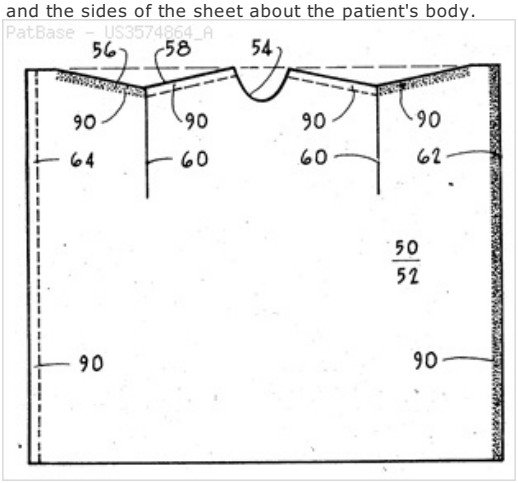
US class: 2/11.4 2/114 428/100

Classification Explorer

Cited documents: US818351 A, US782819 A, US3574864 A, US3451062 A, US3399406 A, US3343537 A, US3276036 A, US3230546 A, US3218649 A, US3156927 A, US3155984 A, US2973523 A, US2818573 A, US2792326 A, US2701364 A, US2692989 A, US2523860 A, US2515423 A, US2364568 A, US2329055 A, US1489046 A, US1233156 A, CA600109 A,

Forward Citations: WO08057435, WO08057435, USD791434, USD787780, USD785284, USD779156, USD779155, USD774729, USD741044, USD736493, USD690905, USD687210, USD630821, USD624280, USD457289, US9820751, US9320308, US8562774, US8470440, US8230519, US8141172, US8056146, US8034430, US7971274, US7496971, US6154883, US6138278, US6004670, US5912059, US5888335, US5685873, US5664302, US5636414, US5622578, US5616385, US5593750, US5586371, US5415650, US5036547, US5025501, US4884298, US4864657, US4759083, US4631756, US4570268, US4177812, US4040124, US4017909, US3949426, US3921221, US3903620, US3861974, US3835555, US3751730, US3745587, US2015135398, US2014310858, US2014173803, US2013318682, US2013239285, US2012005804, US2011184068, US2011154554, US2011024485, US2011023210, US2010299805, US2010212063, US2009282598, US2008107861, US2008058753, US2007099531, US2007099530, US2007098953, US2005284488, US2005129335, US2005059945, US2004088774, FR2423172, EP0195233,

Abstract:
Source: US3574864A A disposable hospital patient's gown made from a sheet of disposable material with a medial neck **opening**, and arm **openings** with a cohesive-adhesive applied to confronting surfaces of the sheet at the top edge intermediate said arm **openings** and said neck **opening**, and intermediate said arm **openings** and said side edges, and applied along the confronting surface areas of the side edges so the areas of application have spaces therein without cohesive-adhesive as a means for attaching, separating and reattaching the top edge of the sheet and the sides of the sheet about the patient's body.



260) Family number: 21815586 (FR1540109A)

Title:	BOITE REFERMABLE **RESEALABLE BOX** (Machine translation)
Priority:	FR19670123626 19671006

Family:

Publication number	Publication date	Application number	Application date
FR1540109 A	19680920	FR19670123626	19671006

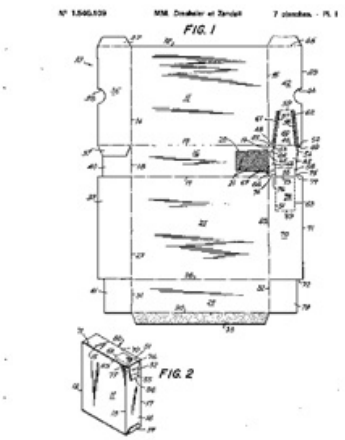
Inventor(s):(std):	DRECHSLER LEE ; ZANDELL FRED
International class (IPC 8-9):	B65D5/70 (Advanced/Invention); B65D5/70 (Core/Invention)
International class (IPC 1-7):	B65D5/70 B65D5/76
CPC:	B65D5/701
European class:	B65D5/70B

Classification Explorer

Abstract:
Source: FR1540109A [Source: Claim 1] **ATTENTION** debut du champ CLMS peut contenir fin de DESC **. partie 158b et qui est couverte d'une matiere antiadhesive 153b. A l'interieur de la partie 152b est prevue une ligne d'ouverture 154b, la partie 152b etant decoupee en 162 de facon a ne laisser qu'une partie circulaire ou ayant une autre forme speciale 163 qui peut etre enlevee en la detachant le long de la ligne 154b. La partie 163 pourrait etre marquee afin de constituer un jeton ou une contre-marque, par exemple, pour une remise ou pour un autre usage. Une languette 150 s'etend de l'extremite du panneau superieur interieur 137b et est pourvue d'un revetement 155b de matiere anti-adhesive, dans laquelle des points ou des aires nues 156b ont ete reserves. Quand l'ebauche 120b a ete deployee pour produire la boite 160b, la languette 142b est initialement fixee, de facon detachable, a la languette 150b et apres l'avoir detachee de cette derniere, on peut la faire pivoter vers le haut, en meme temps que la partie de fermeture 158b, pour decouvrir le jeton 163 lequel peut ainsi etre enleve en produisant une ouverture de versement convenable dans le panneau superieur interieur 137b. Le mode de realisation des figures 19-21 utilise une ebauche 120c comportant des panneaux lateraux 121 c, 122c, 123c et 124c. Des panneaux lateraux 121c et 123c s'etendent un panneau interieur 137c et un panneau superieur exterieur 136c. Une patte d'extremite s'etend de l'extremite superieure du panneau 122c, tandis qu'une languette 133c s'etend de l'extremite superieure du panneau lateral 124c. Le panneau superieur exterieur 136c est pratiquement identique aux panneaux 136b, 136a et 136. Toutefois, il est a remarquer que le panneau 136c est articule a un panneau lateral intermediaire 123c et non pas au panneau lateral eloigne 121 c. Le panneau superieur interieur 137c, qui peut egalement etre identique aux panneaux 137b, 137a et 137, est articule au panneau lateral eloigne 121 c. Enfin, le panneau lateral 124c, qui peut etre identique au panneau lateral precedent 122a, comporte un revetement anti-adhesif 155c presentant des points nus 156c permettant d'y fixer de facon detachable la languette 142c de la partie de fermeture 158c. La languette 138c peut comporter une ligne de dechirure ou d'ouverture 157c adaptee a venir se placer sous la partie detachable 152c du panneau superieur interieur 137c. Quand l'ebauche 120c a ete deployee pour produire la boite 160c, il est clair que la paroi superieure exterieure 136c est sur-jacente a la paroi superieure interieure 137c et que la partie 152c de la paroi interieure est sous-jacente a la partie 158c de la paroi exterieure 136c et qu'elle pourra etre enlevee quand la partie de fermeture 158c aura ete ouverte. Cette modification de la disposition des panneaux interieur et exterieur de la paroi superieure du mode de realisation des figures 19-21 illustre l'une des nombreuses variantes auxquelles se prete la presente invention en vue de l'adapter aux differents types ou modeles de machines de cartonnage classiques. RESUME L'invention concerne notamment 10 Une boite refermable qui comprend une paroi de fond; un certain nombre de parois laterales se dressant de ladite paroi de fond autour de la peripherie de celle-ci; une paroi superieure s'etendant entre les extremites superieures des dites parois laterales, ladite paroi superieure comprenant une couche interieure et une couche exterieure collees l'une au-dessus de l'autre, caracterisee par les points suivants consideres separement ou en combinaisons a. Elle comprend deux elements de retention espaces qui s'avancent de l'une, au moins, desdites couches de la paroi superieure, generalement dans le meme plan, au-dela de la paroi laterale adjacente; une languette s'etendant de la couche interieure ou exterieure de ladite paroi laterale entre lesdits elements d'arret et qui est articulee a ladite couche pour pivoter a travers l'espace compris entre lesdits elements; les couches interieure et exterieure de ladite paroi superieure etant formees avec des lignes d'ouverture ou de dechirure-s'etendant a l'interieur de part et d'autre de ladite languette, une partie de la paroi superieure comprise entre lesdites lignes d'ouverture delimitant un couvercle pouvant etre ouvert apres dechirement desdites lignes afin de pouvoir pivoter hors du plan de ladite paroi superieure, ladite languette etant mobile avec ledit couvercle; des ailes formees sur ladite languette pour se deplacer avec celle-ci vers et hors d'une position de retention sous lesdits elements d'arret; lesdites ailes ayant un contour complementaire a celui desdits elements d'arret, quand ils sont dans le meme plan; b. Deux elements d'arret font saillie de la couche interieure et de la couche exterieure, et ladite languette s'etend de ladite couche interieure; c. Les lignes d'ouverture de la couche interieure sont espacees lateralement a l'interieur des lignes d'ouverture de la couche exterieure en delimitant ainsi un epaulement sur ladite couche interieure la partie laterale de la couche exterieure n'etant pas fixee a cet epaulement afin de recouvrir celui-ci en position de fermeture; d. Ladite languette est articulee a la paroi superieure a un emplacement situe a l'interieur des extremites saillantes desdits elements d'arret, afin de permettre auxdites ailes de s'engager et de se degager sous lesdits elements d'arret; e. Ladite languette est fixee de facon detachable au-dessus de ladite paroi laterale adjacente. 20 Une boite refermable qui comprend une paroi de fond, un certain nombre de parois laterales se dressant de cette paroi de fond autour de la peripherie de celle-ci, une paroi superieure interieure s'etendant entre les extremites superieures desdites parois laterales, une paroi superieure exterieure collee sur l'exterieur de ladite paroi superieure interieure, caracterisee par les points suivants consideres isolement ou en combinaisons g. Deux elements d'arret espaces font saillie de la paroi superieure exterieure, dans le meme plan que celle-ci, au-dela de la paroi laterale adjacente, une languette s'etendant de la paroi superieure exterieure entre lesdits elements d'arret et etant articulee a ladite paroi superieure de facon a pivoter a travers l'espace compris entre lesdits elements, ladite paroi superieure comportant des lignes d'ouverture ou de dechirement s'etendant a l'interieur de part et d'autre de ladite languette, la partie de la paroi superieure comprise entre lesdites lignes d'ouverture delimitant un couvercle pouvant etre ouvert en dechirant lesdites lignes de facon a pouvoir tourner celui-ci hors du plan de ladite paroi superieure, ladite languette etant mobile avec ledit couvercle, et des ailes situees sur ladite languette pour se deplacer vers et hors d'une position de retention sous lesdits elements d'arret; g. La partie de la paroi superieure interieure sous-jacente audit couvercle n'est pas fixee a celui-ci et comporte des lignes d'ouverture supplementaires permettant d'enlever ladite partie sous-jacente; h. Ladite partie sous-jacente delimite un jeton enlevable; i. Lesdites lignes d'ouverture supplementaires sont lateralement espacees a l'interieur des premieres lignes d'ouverture mentionnees pour former un prolongement lateral dudit couvercle exterieurement au-dela de ladite partie sous-jacente, lesdites parties laterales du couvercle n'etant pas fixees a la paroi superieure interieure en position de fermeture; j. Ladite languette est articulee a la paroi superieure exterieure a un emplacement situe a l'interieur des extremites saillantes desdits elements d'arret, afin de permettre auxdites ailes de se placer en position de retention sous lesdits elements; k. Une languette supplementaire s'etend de l'extremite superieure de ladite paroi laterale adjacente et est fixee sous ladite paroi superieure interieure; I. Ladite languette supplementaire est sous-jacente a ladite partie de la paroi superieure interieure et comporte des lignes de dechirement pour se detacher quand on enleve ladite partie de la paroi superieure interieure; m. Ladite languette s'etend de ladite paroi superieure interieure et est fixee a la paroi laterale adjacente sous la premiere languette mentionnee, cette premiere languette etant fixee de facon detachable au-dessus de ladite languette supplementaire. 30 Une ebauche pour une boite refermable, caracterisee par les points suivants pris isolement ou en combinaisons n. Elle comprend un certain nombre de panneaux de paroi laterale articules ensemble cote a cote, une paire de panneaux de paroi de fond relies a l'une des extremites d'une paire alterne de panneaux de paroi laterale, une paire de panneaux de paroi superieure articules a l'autre extremite de la paire alterne de panneaux de paroi laterale, une paire de levres espacees faisant saillie de l'une des extremites du panneau de paroi superieure exterieur, une languette articulee a ladite extremite du panneau de paroi superieure exterieur entre lesdites levres, et une paire d'ailes situees sur ladite languette a l'exterieur desdites levres, ledit panneau de paroi superieure presentant des lignes de dechirement ou d'ouverture s'etendant a l'interieur des cotes opposes de ladite languette, ledit panneau de paroi superieure interieur ayant une partie proche de l'une de ses extremites qui presente des lignes de dechirement supplementaires permettant d'enlever ladite partie; o. Ladite partie du panneau lateral superieure interieur comporte un revetement non adherant; p. Lesdites extremites des panneaux de paroi superieure interieur et exterieur sont adjacentes l'une de l'autre; q. Lesdites extremites desdits panneaux de paroi superieure interieur et exterieur sont eloignees

l'une de l'autre; r. Une languette supplementaire est articulee a l'une des extremites d'un panneau de paroi laterale restant voisin de ladite extremite du panneau de paroi superieure exterieur aux fins de fixation audit panneau de paroi superieure interieur; s. Une languette supplementaire est articulee a ladite extremite du panneau de paroi superieure interieur aux fins de fixation au panneau de paroi laterale restant voisin. [Source: Claim 1] ** WARNING ** start of CLMS field may contain end of DESC **. part 158b and is **covered** with a non-stick material 153b. In the inside of the portion 152b is provided for an **opening** line 154b, 152b the part being cut by way of a 162 leaving only a circular portion or having another special form 163, which value may be in the detaching along 154b of the line. The portion 163 could be marked to provide a token or against-brand, for example, for a discount or for another use. A tongue 150 extends from the extremity of the top panel 137b inside and is provided with a coating 155b of anti-adhesive material, in which points or 156b bare areas have been reserved. When roughing 120b was deployed to produce the **box** 160b, 142b the **tab** is initially set to detachable way, has the tongue 150b and after having detached from the latter, one can rotate up, concurrently with the closing part 158b, to discover the token 163 which can then be removed by producing a suitable pouring **opening** in the top panel 137b inside. The embodiment of Figures 19-21 uses a roughing 120c having side panels 121c, 122c, 123c and 124c. Lateral panels 121c and 123c 137c EXTEND an interior panel and an upper panel 136c outside. A **tab** extends extremity of the upper end of the panel 122c, 133c while a **tab** extends from the upper extremity of the lateral panel 124c. The top panel 136c exterior is virtually identical to the panels 136b, 136a and 136. However, it was noted that the panel is divided 136c has a lateral intermediate panel 123c, not the distant side panel 121 c. The top panel 137c inside, which can also be identical to the panels 137b, 137a and 137, is structured to distant side panel 121 c. Finally, the lateral panel 124c, which may be identical to the previous 122 a lateral panel, includes an anti-adhesive coating 155c 156c presenting the bare spots suitable for attaching detachable way to the tongue 142c 158c of the closing part. The **tab** 138c may have a tear line or adapted 157c **opening** has to be placed under the detachable part of 152c 137c inside top panel. When roughing 120c was deployed to produce the **box** 160c, it is clear that the outer upper wall 136c is overlying has the inner upper wall 137c and 152c as part of the inner wall underlies a the 158c 136c of the outer wall and it can be removed when the closing portion 158c has been **opened**. This change in the arrangement of interior and exterior panels of the upper wall of the embodiment of Figures 19-21 illustrates one of the many variants which lends the present invention in order to adapt to different types or models conventional cartoning machines. SUMMARY The invention particularly 10 A reclosable **box** which comprises a bottom wall; a number of side walls upstanding from said bottom wall around the periphery thereof; an upper wall extending between the upper ends of said side walls, said upper wall including an inner layer and an outer layer glued one above the other, characterized by the following regarded separately or in combinations a. It consists of two Elements of retention areas that jut one, at least, said layers of the upper wall, usually in the same plane, beyond the adjacent side wall; a tongue extending from the inner or outer layer of said side wall between said stop Elements and is articulated to said layer to rotate through the space between said Elements; the inner and outer layers of said upper wall being formed with **opening** or tear-lines extending inside of either side of said **tab**, a part of the upper wall between said lines delimiting an **opening** lid can be **opened** after TEAR said lines to be pivoted out of the plane of said upper wall, said tongue being movable with said **cover**; TRAINED wings on said **tab** to move therewith into and out of a retention position by said stop Elements; said wings having a complementary shape to that of said stop twigs, when they are in the same plane; b. Two stop Elements project from the inner layer and the outer layer, and said **tab** extends from said inner layer; c. The **opening** lines of the inner layer are spaced laterally on the inside of the **opening** of the outer layer lines thus delimiting a shoulder on said inner layer of the lateral portion of the outer layer not being fixed at the shoulder to to **cover** it in the closed position; d. Said tongue is articulated to the upper wall has a slot located on the inside of the protruding ends of said stop Elements to allow said wings to engage and to disengage said stop under Elements; e. Said tongue is fixed detachably on top of said adjacent side wall. A 20 **resealable** **box** which includes a bottom wall, a number of side walls rising from the bottom wall around the periphery of the latter, an inner upper wall extending between the upper ends of said side walls an upper outer wall pasted on the outside of said upper inner wall, characterized by the following regarded isolation or in combinations g. Two stop Elements areas protrude from the upper outer wall, in the same plane as the latter, beyond the adjacent side wall, a tongue extending from the outer upper wall between said stop Elements and being articulated to said upper wall way has rotated through the space between said Elements, said upper wall having **opening** lines or tearing is extending on the inside of both sides of said tongue, the part of the upper wall between said **opening** lines delimiting a lid that can be **opened** by tearing said lines of a way to turn it out of the plane of said upper wall, said tongue being movable with said **cover**, and LOCATED wings said tongue to move in and out of a retention position by said stop elements; g. The part of the upper inner wall underlying said **cover** is not fixed at one and includes additional **opening** lines for removing said underlying part; h. Said underlying part delimits a removable token; i. Said additional **opening** lines are laterally spaced on the inside of the first mentioned **opening** lines to form a lateral extension of said **cover** externally beyond said underlying part, said lateral parts of the lid not being attached to the upper inner wall in the closed position; j. Said tongue is articulated to the upper outer wall has a slot located on the inside of the protruding ends of said stop Elements to allow said wings to stand in retention position under said Elements; k. An additional **tab** extends from the upper end of said adjacent side wall and is fixed below said upper inner wall; I. Said additional **tab** underlies has said part of the upper inner wall and includes tear lines to detach when removed said part of the upper inner wall; m. Said tongue extends said upper inner wall and is fixed at the side wall adjacent the first mentioned sub **tab**, the first **tab** being fixed so detachable above said additional tongue. A roughing 30 for a reclosable **box**, characterized by the following points taken alone or in combinations No. It includes a number of lateral wall panels articulated together side by side, a pair of bottom wall panels subsequently assembled has one of the ends of a pair of alternate side wall panels, a pair of articulated upper wall panels at the other end of the pair alternates from side wall panels, a pair of spaced lips projecting from one of the ends of the outer top wall panel, a **tab** articulated to the said end of the outer top wall panel between said lips and a pair of wings on LOCATED said tongue on the outside of said lips, said upper wall panel presenting the lines of tearing or **opening** extending on the inside of the opposite sides of said tongue, said wall panel Superior interior with a portion near one of its ends that presents the additional tear lines for removing said part; o. Said part of the upper interior side panel includes a non-adhering coating; p. Said ends of the upper interior and exterior wall panels are adjacent to each other; q. Said ends of said interior and exterior upper wall panels are moved away from each other; r. An additional **tab** is articulated to one end of a side wall panel adjacent remainder of said end of the outer top wall panel for the purpose of attachment to said upper interior wall panel; s. An additional **tab** is articulated to said upper extremity of the interior wall panel for mounting purposes at the side wall panel remaining neighbor.

PatBase - FR1540109_A



261) Family number: 28931644 (US3531359A)

© PatBase

Title: APPARATUS FOR HEAT-**SEALING** OF PLASTIC MATERIALS

Priority: US19670626296 19670327

Family:

Publication number	Publication date	Application number	Application date
DE1778113 B1	19711216	DE19681778113	19680327
DE1778113 B2	00000000		00000000
GB1169338 A	19691105	GB19680009847	19680229
NL6804177 A	19680930	NL19680004177	19680325
US3531359 A	19700929	US19670626296	19670327

Probable Assignee: CANADIAN IND

Assignee(s):(std)**:** CANADIAN IND

Assignee(s): CANADIAN IND LTD ; CANADIAN INDUSTRIES LIMITED

Inventor(s):(std)**:** DAVID JONES ELWYN ; JAMES PARKER DAVID ; PARKER DAVID JAMES ; JONES ELWYN DAVID

Inventor(s): ELWYN DAVID JONES ; DAVID JAMES PARKER

International class (IPC 8-9): B29C65/74 B31B19/64 (Advanced/Invention); B29C65/74 B31B19/00 (Core/Invention)

International class (IPC 1-7): B29C24/00 B29C27/02 B31B B32B31/08 B32B31/20

CPC: Y10T156/1054 Y10T156/1313 B29C65/7441 B29C65/749 B29C66/8511 B29C66/431 B29C65/18 B29C65/30 B29C66/244 B29C66/348 B29C66/81815 B29C66/8242 B29C65/7891 B29C66/8322 B31B70/64 B29C66/1122

European class: B29C65/7441 B29C65/749 B29C65/74D10 B29C65/74H B31B19/64 L29C66/8511 L31B219/60C

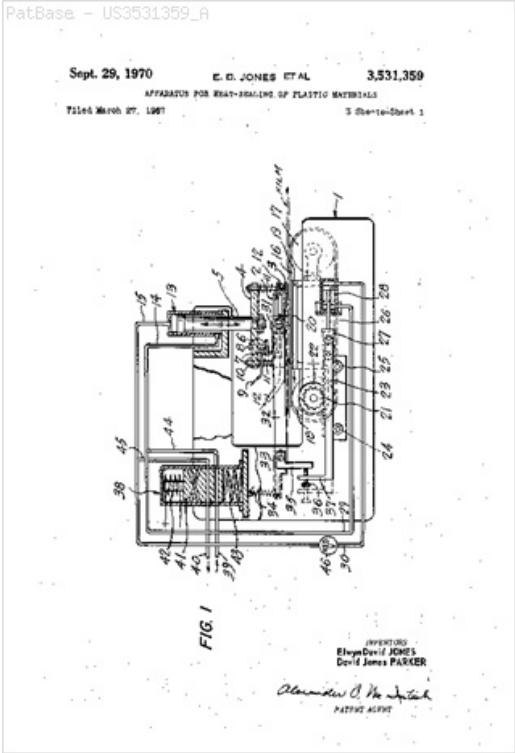
US class: 156/251 156/380.7 156/515

Classification Explorer

Cited documents: US3451870 A, US3334004 A, US3191356 A, IT608482 A,

Forward Citations: US4872942, US4069727, US4002519, US3640790, US3620884, US2006257055,

Abstract:
Source: US3531359A ABSTRACT OF THE DISCLOSURE
A hot blade **sealer** for concurrent heat-**sealing** and cutting of superimposed layers of plastic film having a movable resilient heat-resistant film support which is moved after each **sealing** operation so that the position of contact of the **sealer** blade with the film support is continually being changed. The use of a movable resilient film support avoids fouling of the support by melted plastic during continuous operation of the **sealer**.



262) Family number: 231048 (US3498344A)

Title:	APPARATUS FOR FILLING **BAGS** WITH PREWEIGHED QUANTITIES OF MATERIAL
Priority:	DE1965H056242 19650605 DE1965H056825 19650811

Family:

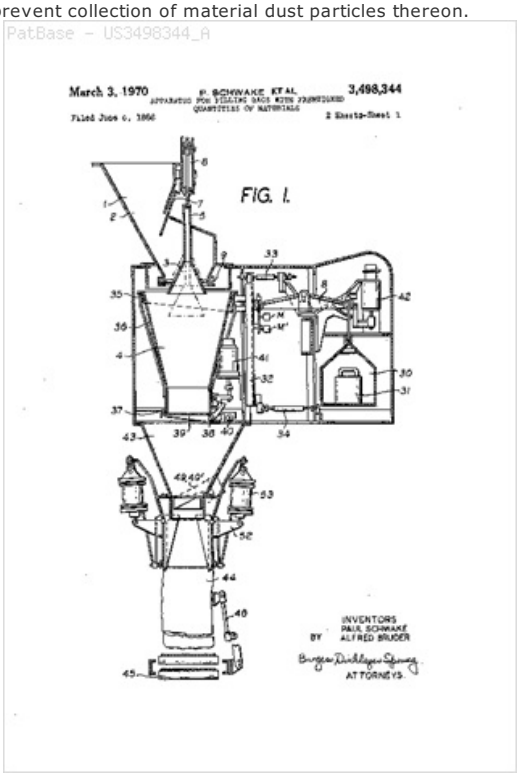
Publication number	Publication date	Application number	Application date
DE1279948 B	19681010	DE1965H056825	19650811
DE1461919 A1	19690213	DE19651461919	19650605
US3498344 A	19700303	US19660555348	19660606
US3589458 A	19710629	US19680763873	19680930

Probable Assignee:	HAVER AND BOECKER
Assignee(s):(std):	HAVER AND BOECKER
Inventor(s):(std):	BRUDER ALFRED ; SCHWAKE PAUL
Inventor(s):	ALFRED BRUDER ; PAUL SCHWAKE
International class (IPC 8-9):	B65B37/18 B65B39/08 B65B55/24 G01G21/00 (Advanced/Invention); B65B39/00 B65B55/00 (Core/Invention)
International class (IPC 1-7):	B65B1/06 B65B29/10 B65B3/06 B65B39/10 B65B55/24 G01G13/02 G01G13/28
CPC:	B65B39/08 B65B55/24 B65B37/18 G01G21/00
European class:	B65B37/18 B65B39/08 B65B55/24 G01G21/00
US class:	141/317 141/93 177/118 177/122 222/518

Classification Explorer

Cited documents:	US548839 A, US3168926 A, US3149649 A, US3120289 A, US2903230 A, US2753097 A, US2723057 A, US2650057 A, US2640630 A, US2632589 A, US2376810 A, US2033586 A, US1386790 A, GB885126 A, BE620562 A,
Forward Citations:	WO07128600, US9771174, US7861499, US7075019, US5443102, US4749008, US4614213, US4444336, US3908773, US3889727, US3830266, US3788368, US2014020339, US2004112461, US2004060367, FR2543460, EP1145999, EP0890513, EP0764584, EP0764584, DE9303096, DE3442186, DE3140332, DE2553031,

Abstract:
Source: US3498344A (Claim 1) 1. An apparatus for filling **bags** with preweighed quantities of materials comprising means for holding and dis- pensing preweighed quantities of materials from a bulk supply thereof, conduit means disposed in underlying relation to said holding and **dispensing** means to receive material discharged therefrom and to guide the flow of said materai into a **bag** for containing same having a ter- minai outlet disposed for communication with the **opening** of such **bag** to deliver said material thereto by gravity flow, a pair of oppositely disposed clamp shells each arranged in partially surrounding relation to the terminal outlet to inhibit the collection of material dust particles between said clamp shells and the interior surface of the **bag** portion which they contact, bracing means disposed for engagement with the periphery of such **bag** when said is disposed in communication with the terminal outlet including a support frame disposed in adjoining relation to the terminal outlet of said conduit means, and wherein said bracing means is operatively connected to said frame for support thereby, actutaor means operatively connected to said frame and to each of said clamp members for selectively pivoting same inwardly with respect to the axis of the terminal outlet to accommodate the insertion of the **opening** portion of a **bag** over and around said clamp members, and for pivoting said clamp members outwardly with respect to the terminal outlet axis to clamp said **bag** **opening** portions against the bracing means during the filling of said **bag**, wherein the improvement comprises: a pair of elastic web members each connected to the opposing lateral end portions of said clamp shells and extending therebetween to define with said clamp shells a laterally enclosed material flow passage therethrough and extending from said terminal outlet into the interior of the **bag** being filled, said web members being disposed for connecting engagement with corresponding peripheral portions of the **bag** which define the **opening** thereof when said clamp shells are pivoted outwardly to clamp their corresponding **bag** **opening** portion to the bracing means whereby when said **bag** is being filled, the clamp shells and web members contact the **bag** around the circumference of its interior surface defining the **opening** thereof to prevent collection of material dust particles thereon.



263) Family number: 77397 (US3438485A)

Title:	**PACKAGE** FOR FILM SHEETS
Priority:	US19670639789 19670519

Family:

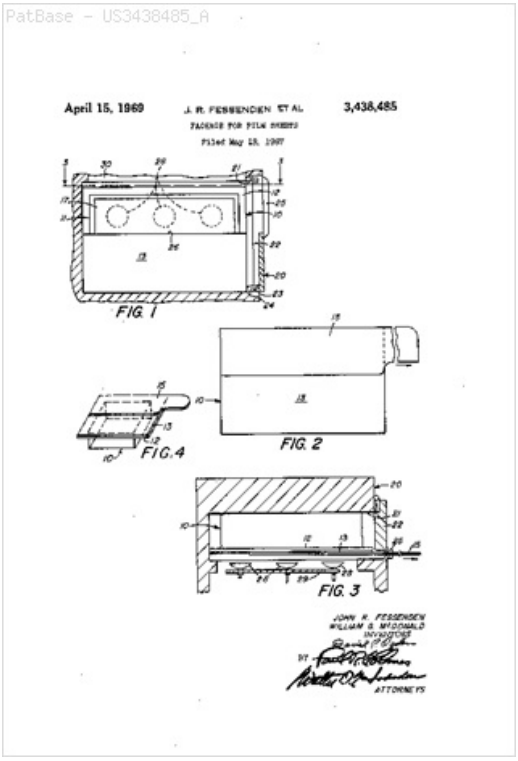
Publication number	Publication date	Application number	Application date
BE715271 A	19681016		19680516
DE1761424 A1	19720420	DE19681761424	19680517
DE1761424 B2	19730111	DE19681761424	19680517
DE1761424 C3	19730726	DE19671761424	19680517
FR1565913 A	19690502		19680517
GB1223883 A	19710303	GB19680023531	19680517
US3438485 A	19690415	US19670639789	19670519

Probable Assignee:	EASTMAN KODAK CO
Assignee(s):(std)**:**	EASTMAN KODAK CO
Assignee(s):	EASTMAN KODAK COMPANY
Inventor(s):(std)**:**	FESSENDEN JOHN R ; FESSENDEN JOHN RICE ; GEORGE MC DONALD WILLIAM ; MCDONALD WILLIAM G ; MCDONALD WILLIAM GEORGE ; RICE FESSENDEN JOHN
Inventor(s):	WILLIAM G MCDONALD ; WILLIAM GEORGE MCDONALD ; JOHN R FESSENDEN ; JOHN RICE FESSENDEN
International class (IPC 8-9):	G03B19/02 G03B21/64 G03C3/00 (Advanced/Invention); G03B19/02 G03B21/54 G03C3/00 (Core/Invention)
International class (IPC 1-7):	B65D17/00 B65D5/54 B65D5/70 B65D75/60 B65D83/00 B65D85/00 B65D85/48 G03B41/18 G03C3/00 G03D15/00
CPC:	G03B19/023 G03B21/64 G03C3/003
European class:	G03B19/02B G03B21/64 G03C3/00D
US class:	206/455 206/557 206/56 229/123.2 229/125.35

Classification Explorer

Cited documents:	US2973087 A,
Forward Citations:	DE2803050, DE2730880,

Abstract:
Source: US3438485A ABSTRACT OF THE DISCLOSURE
A film sheet **package** having a wide tear strip across the full length of one surface. So that the **package** may be remotely **opened**, the tear strip is folded full length across itself to form a straight line pull **tab** as distinguished from the usual unwrap pull **tab**. This arrangement provides a **tab** which extends from a lightproof enclosure so that pulling it will **open** a major portion of the **package** to develop film sheet access without exposing the film. B



264) Family number: 287506 (US3498018A)

Title: METHOD OF FORMING A **PACKAGE**

Priority: US19650445579 19650405

Family:

Publication number	Publication date	Application number	Application date
DE1511693 A1	19691016	DE19661511693	19660405
DE1511693 B2	19741219	DE19661511693	19660405
DE1511693 C3	19750724	DE19661511693	19660405
DE1786613 B1	19770811	DE19661786613	19660405
DE1786613 C2	19780330	DE19661786613	19660405
GB1131629 A	19681023	GB19660014474	19660401
US3498018 A	19700303	US19650445579	19650405

Probable Assignee: MAYER AND CO INC O

Assignee(s):(std)**:** MAYER AND CO INC O ; MAYER AND CO OSCAR

Assignee(s): OSCAR MAYER AND CO ; OSCAR MAYER AND CO INC ; OSCAR MAYER AND CO INC CHICAGO ILL V ST A ; OSCAR MAYER AND COINC

Inventor(s):(std)**:** AUSTIN GLENN M ; AUSTIN GLENN MINOR ; EUGENE SEIFERTH OSCAR ; GIFFORD MAURICE ; GIFFORD MAURICE J ; GIFFORD MAURICE JENNINGS ; JENNINGS GIFFORD MAURICE ; MINOR AUSTIN GLENN ; SEIFERTH OSCAR E ; SEIFERTH OSCAR EUGENE

Inventor(s): OSCAR E SEIFERTH ; MAURICE J GIFFORD ; GIFFORD MAURICE JENNINGS MONONA ; GLENN M AUSTIN

International class (IPC 8-9): B65B1/24 B65B7/28 B65D75/28 B65D75/32 (Advanced/Invention); B65B1/00 B65B7/28 B65D75/28 (Core/Invention)

International class (IPC 1-7): B65B1/24 B65B25/06 B65B3/12 B65B31/00 B65B7/28 B65D1/10 B65D6/00 B65D85/00

CPC: B65B1/24 B65B7/2878 B65D75/28 B65D75/32 B65D75/366

European class: B65B1/24 B65B7/28F4 B65D75/28 B65D75/32 B65D75/36F

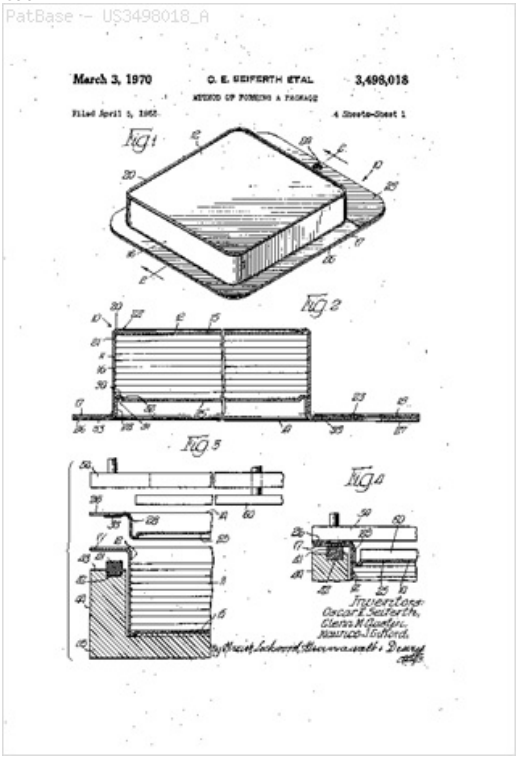
US class: 206/484 206/525 53/22 53/220 53/433 53/436 53/471 53/489

Classification Explorer

Cited documents: US3214074 A, US3172768 A, US3087823 A, US3070446 A, US3020686 A, US3010262 A, US3009302 A, US2938801 A, US2899782 A, US2621129 A, US2027430 A,

Forward Citations: WO8403079, WO12127479, WO02090207, US9731882, US9049909, US8911807, US8763806, US8646244, US8468786, US8419889, US8177066, US8158174, US8088421, US7832560, US7731997, US7571810, US7172779, US6571953, US6167682, US5795604, US5169447, US5129517, US5054266, US5031383, US5007231, US4945710, US4944134, US4850504, US4838008, US4688369, US4590000, US4577757, US4564469, US4498588, US4411122, US4383607, US4063367, US4055671, US3972155, US3903309, US3901000, US3873735, US3835224, US3685717, US3595428, US2014083885, US2012031908, US2011203722, US2011139661, US2011111099, US2010258569, US2010237088, US2010025278, US2009078590, US2009038977, US2008128424, US2007116805, US2007051652, US2006151350, US2004062838, JP62122968, JP60500616, GB2190892, GB2190892, GB2143198, FR2533743, FR2189265, EP0810162, EP0385565, EP0320113, EP0222558, EP0105002, DE2147148,

Abstract:
Source: US3498018A ABSTRACT OF THE DISCLOSURE
A **package** and a method of forming the same wherein a quantity of a compressible product is arranged in the form of an upright mass on a bottom forming, raised panel portion of a ssmi-rigid preformed plastic base which has flange-like, peripherally extending marginal portions connected by a peelable adhesive to like marginal portions of an inverted cup-shaped, transparent body member of semi-rigid, preformed plastic and the product is compressed by a pressure applying plate engaging the bottom panel so as to completely fill the available space within the **package** with the product and to shape the product to conform substantially to the interior of the **container** while being **sealed** under vacuum.



265) Family number: 980586 (US3525194A)

Title:	METHOD FOR PRODUCING READILY **OPENABLE** PLASTIC COATED **CONTAINERS**
Priority:	US19670674458 19671011 US19690871193 19691022

Family:

Publication number	Publication date	Application number	Application date
BE717493 A	19690102		19680702
DE1761912 A1	19710916	DE19681761912	19680720
ES357616 A1	19700316	ES19680357616	19680828
FR1570316 A	19690606		19680627
GB1219337 A	19710113	GB19680028415	19680614
NL6810366 A	19690415	NL19680010366	19680722
SE338495 B	19710906	SE19680007827	19680611
US3525194 A	19700825	US19670004458	19671011
US3623452 A	19711130	US19690871193	19691022

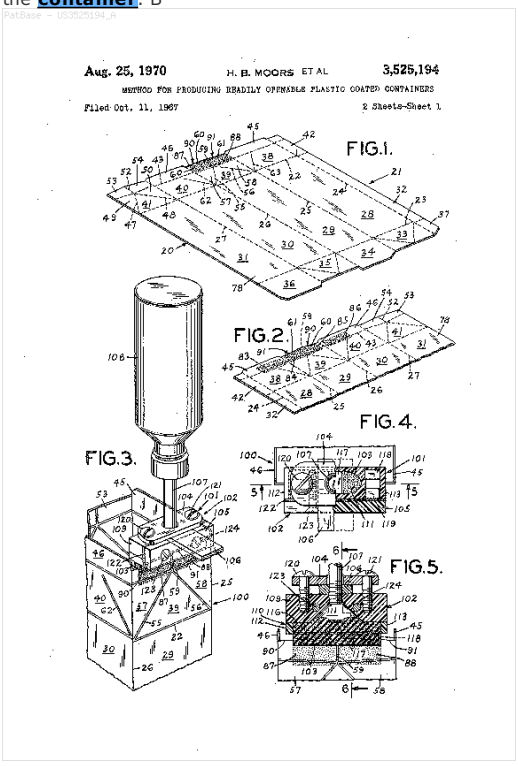
Probable Assignee:	INT PAPER CO
Assignee(s):(std)**:**	INT PAPER CO
Assignee(s):	INTERN PAPER CO ; INTERNATIONAL PAPER CO ; INTERNATIONAL PAPER COMPANY
Inventor(s):(std)**:**	BICHAYLO F ; BICHAYLO FREDERICK E ; MOORS H ; MOORS HAROLD B ; EDWARD BICHAYLO FREDERICK ; BERNARD MOORS HAROLD
Inventor(s):	HAROLD B MOORS ; FREDERICK E BICHAYLO
International class (IPC 8-9):	B65B51/00 B65B65/06 B65D33/36 (Advanced/Invention); B65B51/00 B65B65/00 B65D33/36 (Core/Invention)
International class (IPC 1-7):	B05C11/10 B31B1/60 B31B1/64 B31B15/74 B31B3/60 B31B5/60 B65B51/00 B65B7/18 B65D33/36 B65D5/10 B65D5/74
CPC:	Y10S493/901 B65B65/06 B65B51/00
European class:	B65B51/00 B65B65/06
US class:	118/267 156/289 493/121 493/129 493/167 493/184 493/901 53/37 53/370 53/412 53/467 53/477 53/491

Classification Explorer

Cited documents:	US3392076 A, US3303761 A, US3107586 A, US3002328 A, US2989025 A, US2186124 A, US1996289 A, US1372908 A, CA650267 A,
Forward Citations:	US5445793, US5220769, US4903844, US3593625, FR2437352, EP0028941,

Abstract:

Source: US3525194A ABSTRACT OF THE DISCLOSURE
The major portion of the raw edge (and adjacent areas) of the pouring spout of a plastic coated gable-top con- 15 tainer is wet prior to heat **sealing** of the gable top and then the gable top is heat **sealed** to effe et a liquid tight **Container** **closure**. The Wetting material, all or most of which should be a volatile liquid, coats the raw edge and penetrates the fibers of the coated stock. A Wetting agent 20 and/or a thickening agent is used to achieve Wetting and to provide a coating of the Wetting material on the raw edge and adjacent areas. The heat **sealing** step is per-formed promptly to avoid substantial loss of Wetting material from the raw edge. The apparatus contacts the raw 25 edge with a liquid carrying member, e.g., a suitable sponge, which transfers the Wetting material to the raw edge without dripping of Wetting material into the **container**. B



266) Family number: 31339074 (US3545166A)

Title: METHOD AND MACHINE FOR FORMING AND FILLING **BAGS**

Priority: FR19680182034 19681230 US19670679283 19671009 US19670689177 19671208 US19680706817 19680220

Family:

Publication number	Publication date	Application number	Application date
DE1761577 A1	19701112	DE19681761577	19680610
DE1813166 A1	19690821	DE19681813166	19681206
DE1901109 A1	19690911	DE19691901109	19690110
DE1901109 B2	19750130	DE19691901109	19690110
DE1901109 C3	19750904	DE19691901109	19690110
DE6900845 U	19690710	DE19690000845U	19690107
FR1595961 A	19700615		19681206
FR1600082 A	19700720		19681230
FR1600364 A	19700828		19681231
GB1195959 A	19700624	GB19680057719	19681205
GB1203868 A	19700903	GB19680056646	19681129
JP50017914 B4	19750625	JP19690006801	19690131
JP52020320 B4	19770602	JP19750101698	19750820
US3420172 A	19690107	US19670009283	19671009
US3545166 A	19701208	US19670689177	19671208
US3553934 A	19710112	US19680706817	19680220

Probable Assignee: RIEGEL PAPER CORP

Assignee(s):(std)**:** BARTELT ENGINEERING CO ; BARTELT ENGINEERING CO IN ; BARTELT ENGINEERING CO INC ; LABEL MATIC INC ; RIEGEL PAPER CORP ; RIEGAL PAPER CORP

Assignee(s): REXHAM CORP ; REXHAM CORP NEW YORK N Y V ST A

Inventor(s):(std)**:** F LENSE ROBERT ; JOHNSON KENNETH R ; KAPLAN IRVING ; LENSE ROBERT F ; R JOHNSON KENNETH

Inventor(s): ROBERT F LENSE ; KENNETH R JOHNSON ; IRVING KAPLAN

International class (IPC 8-9): B65B43/04 B65B43/54 B65B59/00 B65B9/08 B65B9/093 B65C1/00 B65C11/02 B65H35/00 (Advanced/Invention); B65B43/00 B65B43/42 B65B59/00 B65B9/06 B65C1/00 B65C11/00 B65H35/00 (Core/Invention)

International class (IPC 1-7): B41F3/18 B41K3/36 B65B1/02 B65B11/12 B65B43/04 B65B43/30 B65B43/36 B65B43/46 B65B59/02 B65B9/08 B65C11/02 B65H35/00

CPC: B65B5/022 B65B43/30 B65B43/52 B65B43/60 B65B43/54 B65C11/0231 B65H35/002 B65B9/093 B65C11/021 Y10T83/05

European class: B65B43/30 B65B43/52 B65B43/54 B65B43/60 B65B5/02B B65B9/093 B65C11/02B2 B65C11/02B2B2D B65H35/00B2

US class: 101/291 156/384 493/196 493/239 493/254 53/183 53/201 53/29 53/385.1 53/386.1 53/452 53/459 53/558 53/562 83/34

Classification Explorer

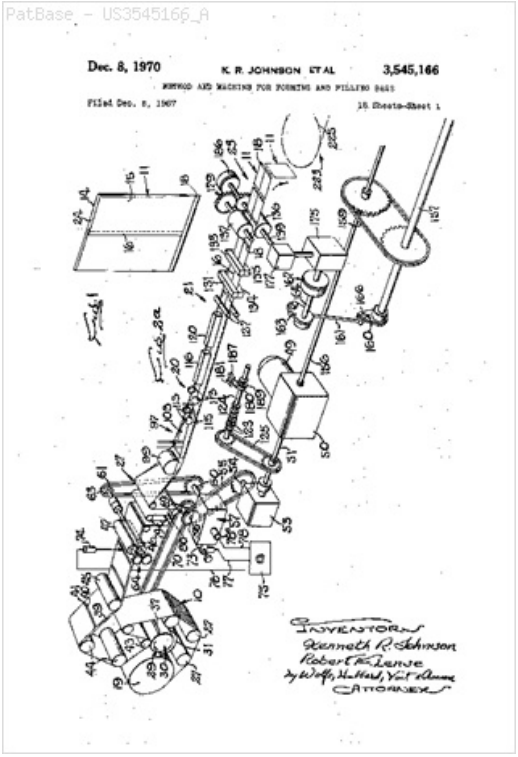
Cited documents: US3432986 A, US3265553 A, US3231446, US3221474 A, US2292295 A, US1871993 A, US141336 A, JP47012506, JP40012335, AU139021,

Forward Citations: WO9902409, WO9426596, WO9014272, US8578685, US8091455, US8015727, US8002011, US7802416, US7603832, US7021036, US6880314, US6634404, US6393809, US6381919, US6276117, US6272815, US6195967, US6050061, US5913795, US5845463, US5830118, US5816990, US5586708, US5568718, US5394676, US5367858, US5133172, US5080747, US5058364, US5024645, US4909425, US4881462, US4730439, US4710157, US4662147, US4642973, US4580473, US4537014, US4517788, US4451323, US4423583, US4380446, US4154166, US4125419, US4111736, US4111735, US4081942, US4075052, US4070951, US4057452, US4056424, US4041673, US3983794, US3960642, US3957562, US3954545, US3912066, US3903672, US3855907, US3800701, US3782279, US3700388, US3656274, US3619326, US3522131, US2016122055, US2014352255, US2010269452, US2010139219, US2007157571, US2006277869, US2004206056, US2004068966, JP57044127, JP50015172, JP2006151406, ITBO20100065, FR2748989, FR2317172, FR2317172, FR2213874, ES2503518, ES2289858, ES2273554, EP3127825, EP2354011, EP1447331, EP1447331, EP0808770, EP0114084, EP0042073, DE2908394, DE2557544, DE2462984, DE2360963, DE2357424, DE19917734, DE1927163, DE102013105755, CN105059632, CN104528453, CN104528007, CN103538761, CN102152498, CN101837842, AU696955, AU624957, AU583355, AU568091,

Abstract:

Source: US3545166A ABSTRACT OF THE DISCLOSURE
For forming **bags** from a continuous web of flexible material and for filling the **bags** with a quantity of loosely compacted and irregularly shaped particles, the web first 15 is advanced continuously through a coating station where a rotatable drum prints adhesive strips on the web, is advanced step-by-step along a horizontal path through a forming station where the web is folded gradually into a tube with an upwardly facing seam, and then is ad- 20 vanced through a **sealing** station where some of the adhesive strips are activated to **seal** the seam and to form the bottom **seals** of the ultimate **bags**. Thereafter, the tube is severed along the leading edge of each bottom **seal** to separate the tube into a number of **bags** with hori- 25 zontally facing **open** ends, the **bags** are turned into upright positions with the **open** ends facing upwardly, and then are advanced in spaced relation through a filling station to receive a measured charge of the particles. Before being filled, the body of each **bag** is expanded 30 with air and the **open** end of the **bag** is formed into a generally circular mouth to accommodate a rapidly flowing particle stream of large cross-section. After the **bag** has been filled, the circular mouth is stretched and flattened and the remaining adhesive strip is activated to 35 **seal** the mouth and enclose the particles in the **bag**. B

PatBase - US3545166_A



267) Family number: 466237 (US3454210A)

Title: EASY **OPENING** AND RECLOSABLE **PACKAGE**,FILM THEREFOR AND PROCESS

Priority: US19670652456 19670711 US19680735493 19680523

Family:

Publication number	Publication date	Application number	Application date
DE1761816 A1	19710826	DE19681761816	19680710
DK118595 B	19700907	DK19680003399	19680711
GB1241223 A	19710804	GB19680032649	19680709
JP50037598 B4	19751203		00000000
NL6809844 A	19690114	NL19680009844	19680711
US3454210 A	19690708	US19680735493	19680523

Probable Assignee: STANDARD PACKAGING CORP

Assignee(s):(std)**:** STANDARD PACKAGING CORP

Inventor(s):(std)**:** MONIA V ; MONIA VICTOR ; SPIEGEL F ; SPIEGEL FRANCIS X ; XAVIER SPIEGEL FRANCIS

Inventor(s): FRANCIS X SPIEGEL ; FRANCIS XAVIER SPIEGEL ; VICTOR MONIA

International class (IPC 8-9): B65D75/30 B65D75/58 B65D75/64 (Advanced/Invention); B65D75/28 B65D75/52 (Core/Invention)

International class (IPC 1-7): B29C B29D9/00 B32B27/08 B65D33/16 B65D5/54 B65D6/00 B65D75/30 B65D8/02 B65D85/72 B65D85/76

CPC: B65D75/30 B65D75/5855 B65D2575/586

European class: B65D75/30 B65D75/58F L65D575/58R

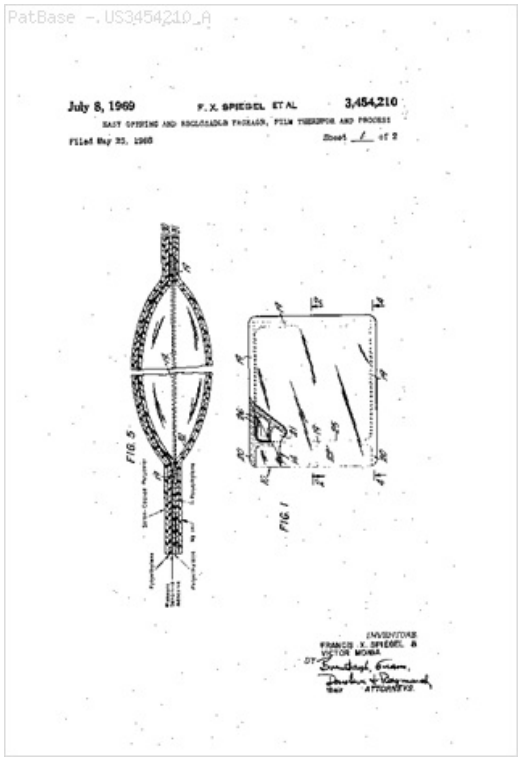
US class: 229/123.1 229/125.35 229/43 229/5.81

Classification Explorer

Cited documents: US3335939 A, US3272422 A, US3202271 A, US3192091 A, US2954116 A,

Forward Citations: WO15103176, WO14074506, WO11123410, WO10114879, US9835562, US9809368, US9708104, US9688442, US9663282, US9656783, US9630761, US9550616, US9221590, US9205967, US9187228, US9150342, US8951591, US8889205, US8746490, US8746483, US8722122, US8580067, US8551588, US8408792, US8308363, US8114451, US7963413, US7422782, US7364359, US6984067, US6857561, US6777050, US6511723, US6471401, US6440508, US6356724, US6302290, US6273610, US6244746, US6122897, US6040024, US5922428, US5882789, US5882749, US5878306, US5533622, US5388757, US5238306, US5172854, US5167974, US4981218, US4964515, US4955530, US4915289, US4707200, US4498588, US4469258, US4444310, US4381848, US4279344, US4055672, US3997677, US3977153, US3946872, US3946871, US3942640, US3910410, US3854653, US3809230, US3770122, US3674134, US3650386, US3647485, US3628689, US3608707, US3552638, US2015316484, US2013121624, US2013056470, US2012128835, US2010196550, US2010189894, US2010172604, US2009205291, US2008096748, US2007054071, US2006172131, US2006138009, US2005186369, US2004226990, JP55033223, JP48018673, GB2235912, FR2890941, EP2204282, EP2154082, EP1584569, EP1053952, EP0769369, EP0769369, EP0453509, EP0453509, EP0446005, EP0058041, DE2943767, DE2255026, CN102869585, AU652142, AT413094,

Abstract:
Source: US3454210A ABSTRACT OF THE DISCLOSURE
A **package** having an easy **opening**, reclosable **seal** is formed by bonding together preselected areas of upper and lower members, at least one of which is a laminate having a pressure-sensitive adhesive as one layer of the laminate. The pressure-sensitive adhesive layer is carried by a base web and is **covered** by a bondable, rupturable film to form one member of the **package**. The bondable film is bonded to the surface of the other member to complete the **package**. This bond, and the bond formed by the pressure-sensitive adhesive between the base film and the rupturable film have a strength in excess of the strength required to tear the rupturable film. This is a continuation-in-part application of application Ser. No. 652,456, filed July 11, 1967.



268) Family number: 19181731 (US3604615A)

Title: SEALED PACKAGING UNIT WITH TEAR STRING

Priority: SE19670016758 19671206

Family:

Publication number	Publication date	Application number	Application date
BE724994 A	19690516		19681205
BR6804605 A0	19730130	BR19680204605	19681205
CH502927 A	19710215	CH19680018151	19681205
DE1812198 A1	19690703	DE19681812198	19681202
ES158152 U	19701001	ES19700158152U	19700430
ES158152 Y	19710801	ES19700158152U	19700430
ES361087 A1	19701016	ES19680361087	19681205
FI50951 B	19760531	FI19680003461	19681204
FI50951 C	19760910	FI19680003461	19681204
FR1603487 A	19710419		19681203
GB1254300 A	19711117	GB19680057899	19681205
IE32546 B	19730905	IE19680001475	19681203
IE32546 L	19690606	IE19680001475	19681203
IL31230 A0	19690227	IL19680031230	19681205
IL31230 A1	19710825	IL19680031230	19681205
IS1809 A7	19690122	IS19680001809	19681204
NL6817406 A	19690610	NL19680017406	19681204
NL6817406 A1	19690610	NL19680017406	19681204
NO128705 B	19740102	NO19680004867	19681204
SE334842 B	19710503	SE19670016758	19671206
US3604615 A	19710914	US19680779547	19681127
YU31386 B	19730430	YU19680002848	19681204

Probable Assignee: FOERVALTNINGS AB ACTA

Assignee(s):(std)**:** FOERVALTNINGS AB ; FOERVALTNINGS AB ACTA ; FOERVALTNINGS AB SW ; FOERVALTNINGS ACT AB ; FOERVALTNINGS ACTA AB ; FORVALTNINGS ACTA AB ; FORVALTINGS APTIEBOLAGET ACTA ; FORVALTNINGS AKTIEBOLAGET ACTA ; FOERVALTNINGS AKTIEBOLAGET ACT ; FORVALTNINGS AB ACTA ; FOERVALTNINGS AKTIEBOLAGET ACTA ; FORVALTININGS AB

Assignee(s): FOSBEL INTELLECTUAL AG

Inventor(s):(std)**:** BARREMAN G ; BARREMAN G SW ; BARREMAN GUSTAV SIGORD ; BARREMAN GUSTAV SIGURD ; GUSTAV SIGURD BARREMAN ; SIGURD BARREMAN GUSTAV

Inventor(s): GUSTAV SIGORD BARREMAN

International class (IPC 8-9): B29C65/18 B65B51/10 B65B51/32 B65D17/00 B65D25/02 (Advanced/Invention); B29C65/18 B65B51/00 B65B51/10 B65D17/00 B65D25/02 (Core/Invention)

International class (IPC 1-7): B29C17/02 B65B51/10 B65B51/14 B65B51/32 B65B7/18 B65B7/28 B65D1/16 B65D1/22 B65D11/00 B65D17/02 B65D17/06 B65D17/14 B65D17/20 B65D17/50 B65D3/10 B65D3/26 B65D39/02 B65D41/20 B65D51/14 B65D53/06 B65D8/00 B65D8/02 B67B3/00 B67D5/32

CPC: B29C66/8181 B65B51/10 B65B51/32 B65D17/00 B65D25/02 B29C66/542 B29C66/545 B29C65/18 B29C66/81427 B29C66/81431 B29C66/721 B29C66/73921

European class: B29C65/18 B29C66/534 B65B51/10 B65B51/32 B65D17/00 B65D25/02

US class: 220/280 229/119 229/4.5 229/5.5 229/5.84 229/51S 53/329.2 53/412 53/478 53/486 53/489

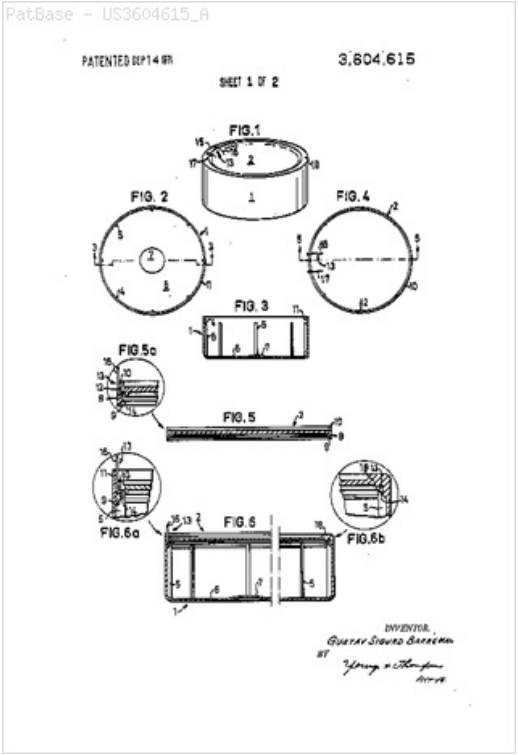
Classification Explorer

Cited documents: US916485 A, US790967 A, US3369726 A, US3362571 A, US3113689 A, US2642911 A, US2120899 A, US2106738 A, US1992182 A, US1678330 A,

Forward Citations: US6817819, US6702582, US5473860, US5305583, FR2490542, DK152770,

Abstract:
Source: GB1254300A 1,254,300. Making containers. FORVALTNINGS A.B. ACTA. 5 Dec., 1968 [6 Dec., 1967], No. 57899/68. Heading B5D. [Also in Division B8] A packaging unit of thermoplastics or thermoplastics-coated material comprises a container 1 having a lid 2 covering the opening thereof and resting against one or more supports on the container wall, the lid being sealed to the container by folding over the edges of the wall encircling the opening and fusing and consolidating them with the peripheral portion of the lid. The apparatus for sealing the container includes an electrically heated copper heat transfer device 22, Fig. 9, a container closure 20, and tubes 28, 29, for leading cooling air or water to the central portion of the lid.

PatBase - US3604615_A



269) Family number: 854349 (US3426769A)

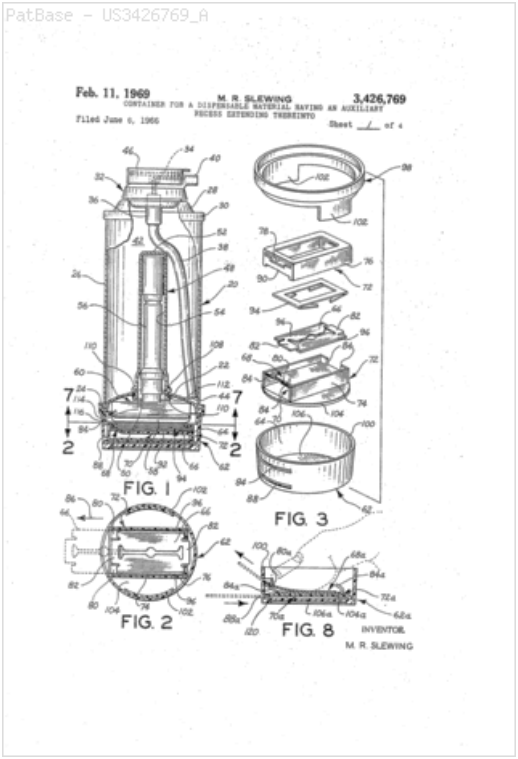
Title:	**CONTAINER** FOR A **DISPENSABLE** MATERIAL HAVING AN AUXILIARY RECESS EXTENDING THEREINTO
Priority:	US19660561654 19660606

Family:

Publication number	Publication date	Application number	Application date
US3426769 A	19690211	US19660561654	19660606

Probable Assignee:	HODGSON R W
Assignee(s):(std):	HODGSON R W ; MERLE R SLEWING
Assignee(s):	R W HODGSON ; RW HODGSON
Inventor(s):(std):	SLEWING MERLE R
Inventor(s):	MERLE R SLEWING
International class (IPC 8-9):	B65D23/12 B65D51/28 B65D83/14 B65D83/16 (Advanced/Invention); B65D23/00 B65D51/24 B65D83/14 B65D83/16 (Core/Invention)
International class (IPC 1-7):	A45D27/22
CPC:	B65D83/22 B65D83/285 B65D23/12 B65D51/28 B65D83/205
European class:	B65D23/12 B65D51/28 B65D83/14W2 B65D83/16B2C L65D583/14Y3B
US class:	132/290 132/80
Classification Explorer	
Cited documents:	US2352951 A, US1810652 A, US1598085 A,
Forward Citations:	WO11009836, WO10102356, US8794249, US7021064, US5944032, US3486630, US2013118515, US2004194472, EP2371738, BE1020139,

Abstract:
Source: US3426769A (Claim 1) 1. A **container** for **dispensable** material having an aux-iliary recess extending thereinto, comprising a can pro-vided with an inwardly extending closed tube having a closed inner end and an access **opening** at its outer end providing convenient access to an interior recess defined within said tube for the positioning therein of an auxiliary object, said inwardly extending closed tube defining said interior recess being of a cross-sectional shape and size and of a longitudinal shape and size such as to receive a longitudinal handle of a safety razor having a safety razor head portion positioned at the outer access **opening** end thereof; and a **closure** cap removably attached to said can in a position effectively extending across and effectively closing said access **opening** and effectively defining therewith a controllably **openable** razor head **storage** chamber to concealingly carry a razor head portion of a safety razor therein during non-use **storage** periods for ready removal thereof when desired for use.



270) Family number: 708745 (US3432986A)

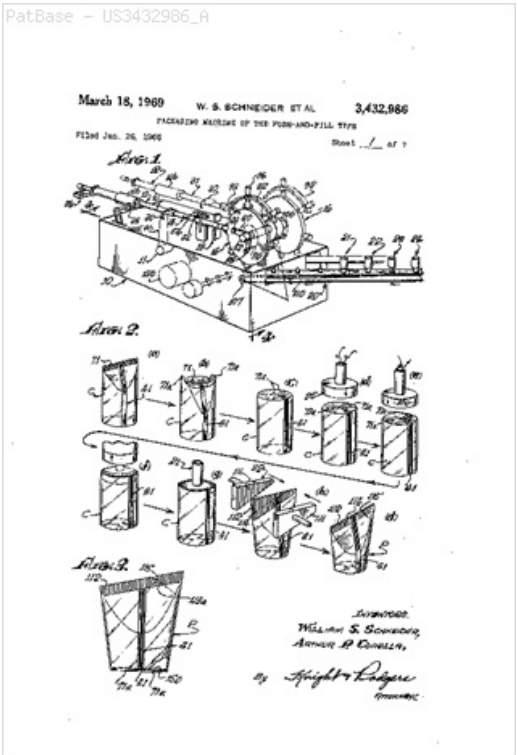
Title:	**PACKAGING** MACHINE OF THE FORM-AND-FILL TYPE
Priority:	US19660523084 19660126

Family:

Publication number	Publication date	Application number	Application date
GB1177541 A	19700114	GB19670003552	19670124
US3432986 A	19690318	US19660523084	19660126

Probable Assignee:	SCHNEIDER CARL
Assignee(s):(std):	CORELLA ARTHUR P ; CORELLA ARTHUR POMPA ; SCHNEIDER WILLIAM S ; WAYNE V RODGERS ; SCHNEIDER CARL ; SCHNEIDER WILLIAM STEVEN
Assignee(s):	ARTHUR P CORELLA ; ARTHUR POMPA CORELLA ; CARL SCHNEIDER ; WILLIAM S SCHNEIDER ; WILLIAM STEVEN SCHNEIDER
Inventor(s):(std):	CORELLA ARTHUR P ; CORELLA ARTHUR POMPA ; SCHNEIDER WILLIAM S ; SCHNEIDER WILLIAM STEVEN
Inventor(s):	WILLIAM S SCHNEIDER ; WILLIAM STEVEN SCHNEIDER ; ARTHUR P CORELLA ; ARTHUR POMPA CORELLA
International class (IPC 8-9):	B65B3/02 (Advanced/Invention); B65B3/00 (Core/Invention)
International class (IPC 1-7):	B31B1/10 B65B3/02 B65B51/26 B65B9/10
CPC:	B65B3/02
European class:	B65B3/02
US class:	493/190 493/196 493/217 53/547 53/558
Classification Explorer	
Cited documents:	US3303761 A, US2881574 A, US2328798 A, GB925169 A,
Forward Citations:	WO16131440, WO04005138, WO0066433, US6832462, US5702339, US5471820, US4881360, US4817366, US4349344, US4338082, US4279608, US4030270, US3545167, US3545166, US3481110, US2012010060, US2004016279, US2004006950, FR2518052, EP0025711,

Abstract:
Source: GB1177541A 1,177,541. Making **bags**. W. S. SCHNEIDER and A. P. CORELLA. 24 Jan., 1967 [26 Jan., 1966], No. 3552/67. Heading B5D. [Also in Division B8] Apparatus for forming filled **packages** includes means to tube a web and **seal** and sever it transversely behind the **open** leading end to form a closed-ended sleeve (Fig. 2a), means fitting the sleeve on a former and for shaping the sleeve bottom on the former to produce a cylindrical circular bottomed **container** (Fig. 2b-2e). The **container** is ejected from the former (Fig. 2f) and carried past filling, **sealing**, trimming and notching stations (Fig. 2g-2j, respectively). **Container** forming.-The described apparatus is of duplex form with heat **sealable** webs W from reels 11 fed to two parallel tubing mandrels 31 (only one shown). The webs pass photo-electric means 28 which, for purposes of registration, vary the forward feed of the tubed web by modifying the longitudinal reciprocation of the mandrel 31 against which it is held by grippers 54. Each mandrel includes a relatively movable portion 31a which is advanced ahead of the body to engage one of a series of formers 50 on a turret 75 without leaving the leading end of the tube. As the mandrel body advances, the tube is threaded on the former, opposed **sealer** bars 42 (see also Fig. 7, not shown) forming a longitudinal seam which is folded down on to the tube. Transverse **sealers** 62 and a knife 73 operate after withdrawal of the mandrel body and head to form on the former 50, the **container** of Fig. 2a. End forming and ejecting.-The **container** is held by grippers 84 and passed beneath a bar 93 which folds down the end seam and produces **tabs** 71a (Fig. 2b). A slotted folder 92 co-operates with the bar to turn over the **tabs** and the base so formed is pressed against the former within by a heated plate 95 and the resultant **seal** cooled by a plate 100. Each former 50 includes a head portion 50b, Fig. 4, which moves outwards radially and remains so extended during bottom forming but is retracted prior to receiving a new **container** tube. The formers have a radial passage through which air is blown to assist in ejecting the **container** on to a conveyer 20 for filling and closing. A bottom reinforcing disc may be positioned in the **container**. A web 146, Fig. 4, is fed to cutter means 147 which severs discs and places them on the end of each former. Suction through the former air passage holds the disc in place until the **container** is placed on and the bottom is about to be formed. Filling and closing.-The apparatus for completing the **package** is not detailed. Each **container** is held in a fitting 108 on the conveyer 20 by suction through an aperture 109. To facilitate pouring, the **closure** **seal**, made by jaws 111, is inclined and the excess 112 is cut off. A notch 115 is then made for ease of **opening**.



271) Family number: 712211 (US3433394A)

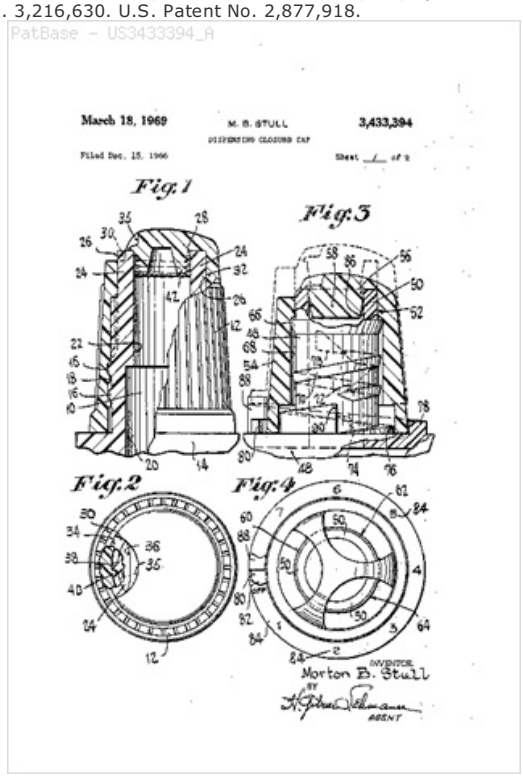
Title:	**DISPENSING CLOSURE** CAP
Priority:	US19660602004 19661215

Family:

Publication number	Publication date	Application number	Application date
GB1187081 A	19700408	GB19670017050	19670413
GB1187082 A	19700408	GB19680042360	19670413
GB1187083 A	19700408	GB19680042361	19670413
GB1187084 A	19700408	GB19680042362	19670413
US3433394 A	19690318	US19660602004	19661215

Probable Assignee:	STULL ENGRAVING CO
Assignee(s):(std):	STULL ENGRAVING CO ; STULL MORTON B ; STULL MORTON BARITZ ; STULL MORTON BARTIZ
Assignee(s):	MORTON BARITZ STULL ; MORTON BARTIZ STULL
Inventor(s):(std):	STULL MORTON B ; STULL MORTON BARITZ ; STULL MORTON BARTIZ
Inventor(s):	MORTON B STULL ; MORTON BARITZ STULL ; MORTON BARTIZ STULL
International class (IPC 8-9):	B65D47/24 (Advanced/Invention); B65D47/04 (Core/Invention)
International class (IPC 1-7):	B65D35/48 B65D47/00 B65D47/26 B67D5/06
CPC:	B65D47/242
European class:	B65D47/24A1
US class:	222/519 222/546
Classification Explorer	
Cited documents:	US2165825 A, US1977537 A, US1935100 A, US1914221 A, GB317198 A, FR1310724 A,
Forward Citations:	WO16045720, WO03084834, US6223957, US4967941, US4927065, US4646949, US4002275, US3848779, EP2394927, DE102010029908,

Abstract:
Source: US3433394A ABSTRACT OF THE DISCLOSURE
A **dispensing closure** cap having a tubular body (through which the product passes) and an annular top edge portion or mouth, and a cap axially movable on the body, having a plug for entry in said mouth to **seal** the body. The cap has in its top an eccentric **opening** normally closed by the top edge portion and which communicates with the space around the plug to constitute therewith a discharge orifice. Crpss-rejerences U.S. application Ser. No. 511,593, filed Dec. 6, 1965, now Patent No. 3,319,843, by Morton B. Stull and entitled, "Captive **Closure** Cap Construction." U.S. Patent No. 3,216,630. U.S. Patent No. 2,877,918.



272) Family number: 83397 (US3471076A)

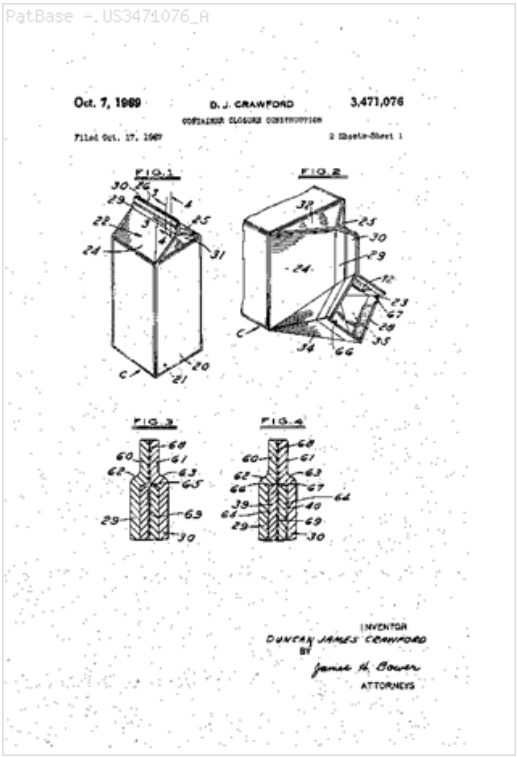
Title:	**CONTAINER CLOSURE** CONSTRUCTION
Priority:	US19670675956 19671017

Family:

Publication number	Publication date	Application number	Application date
AU206842785 A1	19700305	AU19680042785	19680830
BE722448 A	19690401		19681017
CH475131 A	19690715	CH19680014800	19681003
DE1800914 A1	19690529	DE19681800914	19681003
FR1586332 A	19700213		19681015
GB1215963 A	19701216	GB19680043349	19680912
NL6814230 A	19690421	NL19680014230	19681004
US3471076 A	19691007	US19670005956	19671017

Probable Assignee:	EX CELL O CORP
Assignee(s):(std):	EX CELL O CORP
Assignee(s):	EXCELLS O CORP ; ELOTRADE AG
Inventor(s):(std):	CRAWFORD D JAMES ; CRAWFORD DUNCAN JAMES ; JAMES CRAWFORD D
Inventor(s):	DUNCAN JAMES CRAWFORD ; JAMES CRAWFORD ; CRAWFORD DJAMES
International class (IPC 8-9):	B65B61/18 B65D5/06 B65D5/40 B65D5/74 B65D85/72 (Advanced/Invention); B65D5/02 (Core/Invention)
International class (IPC 1-7):	B65D33/16 B65D5/06 B65D5/10 B65D5/70 B65D5/74 B65D85/80
CPC:	B65D5/067
European class:	B65D5/06D
US class:	229/17 229/249
Classification Explorer	
Cited documents:	US3334799 A, US3189246 A,
Forward Citations:	USRE29074, US9452859, US5421512, US5242701, US5176308, US5083702, US4946041, US4518377, US4206867, US2011303739, FR2526756, EP0201169, EP0094888,

Abstract:
Source: US3471076A ABSTRACT OF THE DISCLOSURE
A **container** blank having tufts of sheet material integral along preselected edges of said **container** blank whereby passage of liquid is prevented along channels in final **container** **closure** construction.



273) Family number: 861601 (US3437228A)

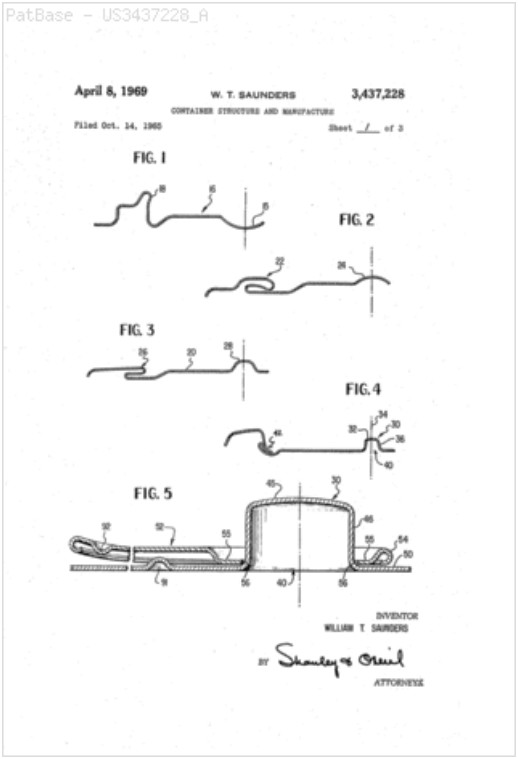
Title:	**CONTAINER** STRUCTURE AND MANUFACTURE
Priority:	US19650495796 19651014

Family:

Publication number	Publication date	Application number	Application date
US3437228 A	19690408	US19650495796	19651014

Probable Assignee:	NAT STEEL CORP
Assignee(s):(std):	NAT STEEL CORP
Assignee(s):	NATIONAL STEEL CORP
Inventor(s):(std):	SAUNDERS WILLIAM T
Inventor(s):	WILLIAM T SAUNDERS
International class (IPC 8-9):	B21D51/38 (Advanced/Invention); B21D51/38 (Core/Invention)
International class (IPC 1-7):	B65D17/24
CPC:	Y10T29/49915 B21D51/383 B65D17/4012
European class:	B21D51/38B B65D17/16B2
US class:	220/273 220/54 29/509 D9/438
Classification Explorer	
Cited documents:	US3338463 A, US3322296 A, US3301431 A, US3235123 A, US3232474 A, US3225957 A, US3215305 A,
Forward Citations:	WO9119655, US3765352, US3507418,

Abstract:
Source: US3437228A (Claim 1) 1. Hand **openable** sheet metal **container** comprising elongated **tab** **opener** means secured at one longitudinal end to one surface of a sheet metal **container** by unitary rivet means formed from sheet metal of the **container**, a scoreline of diminished metal thickness in the sheet metal **container** defining an area to be removed from the **container** by lifting the **tab** **opener** means, the scoreline circumscribing the **tab** **opener** means at the longitudinal end of the **tab** **opener** means secured to the sheet metal **container**, with such longitudinal end of the **tab** **opener** means being aligned with and contiguous to the scoreline such that a lifting force at the remaining longitudinal end of the **tab** **opener** g means causes puncture of the **container** along the aligned portion of the scoreline, means for constraining pivoting of the **tab** **opener** means about the unitary rivet means in a plane substantially parallel to the one surface of the **container** 10 so as to maintain the aligned relationship between the end of the **tab** **opener** means secured to the sheet metal **container** and the circumscribing scoreline at such end of the **tab** **opener** means.



274) Family number: 976449 (US3781158A)

© PatBase

Title: CONTINUOUS CENTRIFUGAL TUBE CASTING APPARATUS USING A LIQUID MOLD

Priority: US19660538506 19660211 US19680768983 19681021 US19710193476 19711028 US19710180927 19710915 US19680769017 19681021

Family:

Publication number	Publication date	Application number	Application date
US3445922 A	19690527	US19660538506	19660211
US3605859 A	19710920	US19680769017	19681021
US3616842 A	19711102	US19680768983	19681021
US3781158 A	19731225	US19710193476	19711028
US3930532 A	19760106	US19710180927	19710915

Probable Assignee: GEORGE R LEGHORN

Assignee(s):(std)**:** GEORGE R LEGHORN ; LEGHORN G ; LEGHORN GEORGE R

Assignee(s): LEGHORN G US

Inventor(s):(std)**:** LEGHORN GEORGE R ; LEGHORN G

Inventor(s): GEORGE R LEGHORN ; LEGHORN G US

International class (IPC 8-9): B21B23/00 B21C37/04 B21C37/06 B22D11/00 B22D11/14 B22D13/02 (Advanced/Invention); B21B23/00 B21C37/00 B21C37/06 B22D11/00 B22D11/14 B22D13/00 (Core/Invention)

International class (IPC 1-7): B21B15/00 B21D5/06 B21D5/08 B21D51/00 B22D11/00 B22D11/02 B22D13/02 B22D27/16 B23P17/00

CPC: B21C37/04 B22D13/023 B22D11/006 B22D13/02 B22D11/144 B21B23/00 B21C37/06 B22D11/143 Y10T29/49989 Y10T29/49991 Y10T29/5184

European class: 7B15 B21B23/00 B21C37/04 B21C37/06 B22D11/00C B22D11/14C B22D11/14D B22D13/02 B22D13/02H

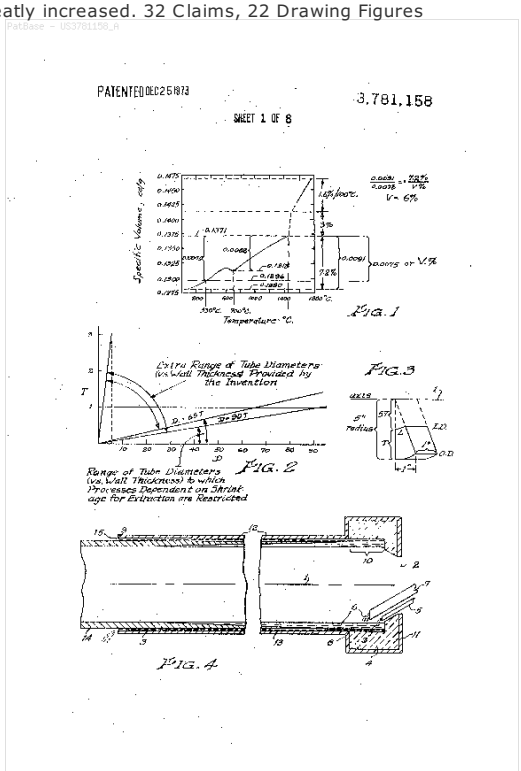
US class: 164/263 164/273R 164/298 164/417 164/422 164/459 164/464 164/474 164/476 164/479 164/62 164/84 264/311 264/320 29/33C 29/527.6 29/527.7 425/43.5 425/435 65/71 72/181

Classification Explorer

Cited documents: US3416591 A, US3367400 A, US3193889 A, US2963758 A, US2940143 A, US2827944 A, US2752648 A, US2707813 A, US2453165 A, US1908168 A, US1831310 A, US1527729 A, US1444953 A, US1377372 A, GB189622708 A,

Forward Citations: WO02101103, WO02101103, US8601711, US7992322, US6986381, US6799627, US6799626, US6776214, US6755239, US6705385, US6634413, US6260602, US6158498, US5133509, US5122218, US5007594, US4775000, US4407056, US4235008, US4073333, US4040875, US3977227, US3844332, US3771587, US3625276, US2013157077, US2011099833, US2009236146, US2004060685, NL1023849, JP52070935, EP1414604, CN102409182,

Abstract:
Source: US3781158A A molten castable substance (as metals, glass, plastic, etc.) is continuously centrifugally cast to tube on a centrifuged lining of a heavier liquid mold material (examples of which are lead, tin, and Wood's metal). The molten substance is continuously introduced into the starting end of the centrifugal casting machine and forms a molten, axially moving, cylinder on the liquid lining. The substantially solidified tube floats out of the bore at the opposite end of the casting machine on a lining of the liquid mold material and without contacting the solid portions of the machine's exit orifice. The unrestricted floating of the tube out of the exit orifice is accomplished by decreasing the diameter of the tube in its molten state by applying a pressure differential between the liquid mold material and the gas internal to the tube being cast. The pressure differential is brought about by various methods as disclosed in the specification. Prior art methods for the continuous centrifugal casting of tube on a liquid mold lining depend on thermal shrinkage of the tube, as it cools in the mold, to permit egress from the machine. Due to the applied pressure differential, such thermal shrinkage to permit unrestricted exit of the tube does not have to be a requirement of the present invention and, as a result, product variability and casting rates can be greatly increased. 32 Claims, 22 Drawing Figures



275) Family number: 86023 (US3501318A)

Title:	METHOD AND APPARATUS FOR PROCESSING PRODUCTS IN FLEXIBLE **CONTAINERS**
Priority:	US19670693330 19671226

Family:

Publication number	Publication date	Application number	Application date
BE725949 A	19690529		19681223
DE1816187 A1	19690814	DE19681816187	19681220
DE1816187 B2	19750522	DE19681816187	19681220
DE1816187 C3	19760122	DE19681816187	19681220
FR1596373 A	19700615		19681224
GB1212790 A	19701118	GB19680060542	19681220
US3501318 A	19700317	US19670693330	19671226

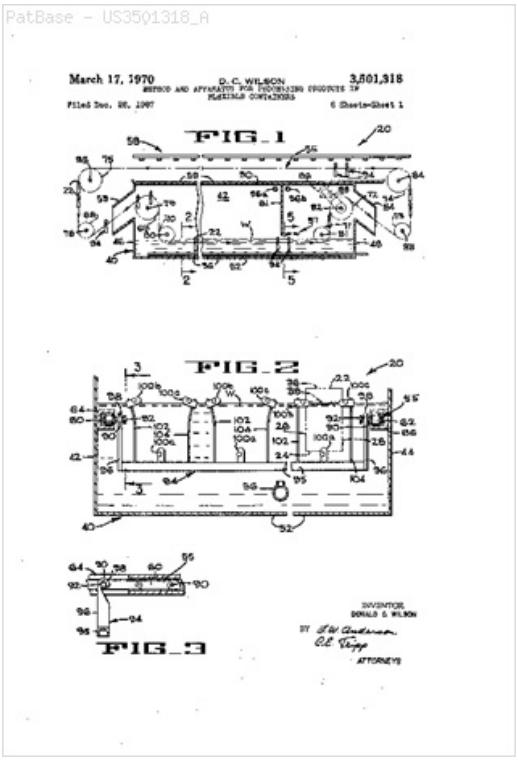
Probable Assignee:	FMC CORP
Assignee(s):(std)**:**	FMC CORP
Assignee(s):	FMC CORP SAN JOSE CALIF V ST A ; F M C CORP
Inventor(s):(std)**:**	CLAYTON WILSON DONALD ; WILSON DONALD C ; WILSON DONALD CLAYTON
Inventor(s):	WILSON DONALD CLAYTON SAN JOSE CALIF V ST A ; DONALD C WILSON ; DONALD CLAYTON WILSON
International class (IPC 8-9):	A23L3/00 A23L3/04 B65B55/02 (Advanced/Invention); A23L3/00 A23L3/02 B65B55/02 (Core/Invention)
International class (IPC 1-7):	A23C3/02 A23L3/00 A23L3/02 A23L3/10 B65B31/00 B65B55/02
CPC:	A23L3/001 A23L3/045 B65B55/027
European class:	A23L3/00B A23L3/04D B65B55/02D
US class:	426/395 426/412 53/127 53/432 99/362 991/850

Classification Explorer

Cited documents:	US3377173 A, US3261140 A, US3108881 A, US3037869 A, US2380134 A, GB188204743 A,
Forward Citations:	WO16128556, WO07127075, USRE29137, US8684600, US8268376, US7594582, US5457939, US5421512, US5242701, US5115626, US4627224, US4122197, US4042103, US3763524, US3658562, US3658559, US2011195167, US2009067759, US2007253647, US2007253646, US2007253645, US2004060458, JP5746678, JP53100377, JP49007444, JP2013063277, GB2432099, EP0372688,

Abstract:

Source: US3501318A ABSTRACT OF THE DISCLOSURE
A method and apparatus for heat treating a flexible **container** which includes gripping a filled flexible resilient **container** near its unsealed mouth to transversely tension the **container** thereby providing a one-way valve near the 15 upper end thereof which prevents entry of fluid into the **container** but permits passage of gas out of the **container**. Moving the **container** through a heating medium whereby cooking gases and steam will form within the **container** due to the heat treatment. Squeezing the **container** by 20 submerging a portion of the **container** in a liquid heating medium which reduces the size of the **container** head space thereby increasing the pressure of gases within the **container** causing the air, cooking gases and steam to flow from the **container** through the one-way valve. There-after **sealing** the upper end of the **container** by application of heat and pressure while the **container** is gripped and is either in the steam atmosphere above the liquid or is partially submerged. CROSS REFERENCE TO RELATED APPLICATIONS The method and apparatus of the present invention is 35 an improvement over the apparatus disclosed in copending Csernak application Ser. No. 459,768 which was filed on May 28, 1965 and is assigned to the assignee of the present invention. This application discloses an apparatus for mechanically evacuating air from the potentially large 40 head space of a flexible **container**. B



276) Family number: 292859 (US3799219A)

Title: FILLING **UNIT** FOR COUNTER-PRESSURE FILLING MACHINES

Priority: DE19671632004 19671216 DE1967S113343 19671216

Family:

Publication number	Publication date	Application number	Application date
BE725558 A	19690529		19681216
DE1632004 A1	19691106	DE19671632004	19671216
DE1632004 B2	19750327	DE19671632004	19671216
DE1632004 C3	19751120	DE19671632004	19671216
ES360266 A1	19700701	ES19680360266	19681114
FR1595981 A	19700615		19681209
GB1232498 A	19710519		19681216
JP50040079 B4	19751222	JP19680091687	19681216
NL159351 B	19790215	NL19680015477	19681030
NL6815477 A	19690618	NL19680015477	19681030
US3799219 A	19740326	US19680783834	19681216

Probable Assignee: SEITZ WERKE GMBH

Assignee(s):(std)**:** SEITZ WERKE GMBH

Assignee(s): SEITZ WERKE GMBH 6550 BAD KREUZNACH ; SEITZ WERKE GMBH DT ; SEITZ WERKE G M B H ; SEITZ WERKE G M B H BAD KREUZNACH BONDSREPUBLIEK DUITSLAND

Inventor(s):(std)**:** KAISER K ; KAISER KLAUS ; RIEDEL R ; RIEDEL RUDOLF ; UTH G ; UTH GERHARD

Inventor(s): UTH G DT ; RIEDEL R DT ; KAISER K DT

International class (IPC 8-9): B41K1/58 B67C3/08 B67C3/12 B67C3/28 (Advanced/Invention); B41K1/00 B67C3/02 (Core/Invention)

International class (IPC 1-7): B65B31/06 B67C3/06 B67C3/26 B67C3/28

CPC: B41K1/58 Y10T137/7287 B67C3/285 B67C3/12 B67C3/281 B67C2003/2685

European class: B41K1/58 B67C3/12 B67C3/28B B67C3/28D6 L67C3/28T

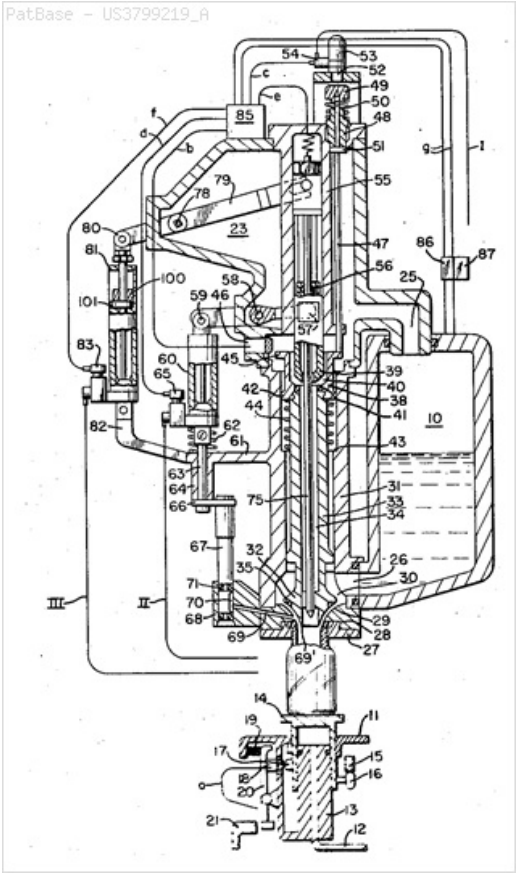
US class: 137/386 141/198 141/266 141/3.9 141/39 141/46 141/48

Classification Explorer

Cited documents: US3443608 A, US3357461 A, US3126741 A, US2377796 A, JP45024632 A2, DE1203631 B,

Forward Citations: WO13167223, WO10097730, WO06127062, US9862586, US9434593, US9309101, US9173520, US9108834, US8499801, US7306200, US6131624, US5727606, US5564481, US5445194, US5402833, US5125441, US4548020, US4319613, US4201249, US4174005, US4171714, US4146065, US3845791, US3797535, US2015114518, US2013139927, US2013074979, US2010083613, US2006278302, US2006266970, JP1089064, ITRM20090066, GB2116530, EP0826601, EP0658511, EP0588356, EP0341627, DE3600301, DE3205925, DE102004022096, CN102317197,

Abstract:
Source: US3799219A An electrical control probe is provided longitudinally movable in a passage of filler valve means and the probe can be retracted and introduced with respect to a **container** engaged with a counter-pressure filling **unit**. A proximity switch, loading gas valve, liquid valve and magnetic control valve are affected by probe movement for actuation and deactuation respectively during liquid filling into the **container**. A sleeve around the probe includes passage means communicating for liquid filling, loading gas supply and exhaust with respect to the **container**. A control rod engageable with a valve seat collar determines valve **opening** and closing according to probe position. An electrical plug card and contact strip interconnect electrical and electronic control **units** for the filling operation.


PatBase - US3799219_A

277) Family number: 91027 (US3625403A)

Title: AEROSOL-TYPE **DISPENSER** FOR **DISPENSING** A POWDERED MATERIAL

Priority: FR19680147102 19680405 FR19680147102Q 19680415

Family:

Publication number	Publication date	Application number	Application date
AT305685 B	19730312	AT19690003347	19690404
AU206952908 A1	19701008	AU19690052908	19690402
BE730924 A	19691002		19690402
CH509107 A	19710630	CH19690004468	19690326
DE1916422 A1	19691113	DE19691916422	19690331
DE1916422 B2	19740704	DE19691916422	19690331
DE1916422 C3	19750213	DE19691916422	19690331
DK130328 B	19750210	DK19690001859	19690402
DK130328 C	19750707	DK19690001859	19690402
FR1602651 A	19710111	FR19680147102	19680405
GB1216616 A	19701223	GB19690017731	19690403
IL31957 A0	19690625	IL19690031957	19690404
IL31957 A1	19720928	IL19690031957	19690404
LU58374 A	19690716		19690404
NL6905164 A	19691007	NL19690005164	19690402
NO131412 B	19750217	NO19690001400	19690401
NO131412 C	19750528	NO19690001400	19690401
OA3338 A	19701215	OA19690053569	19690331
SE344402 B	19720417	SE19690004399	19690328
US3625403 A	19711207	US19690813642	19690404

Probable Assignee: CIBA GEIGY AG

Assignee(s):(std)**:** CIBA GEIGY AG ; CIBA GEIGY CORP ; GEIGY AG J R ; GEIGY J R AG

Assignee(s): J R GEIGY AG ; J R GEIGY S A ; JR GEIGY AG ; GEIGY J AG ; CIBA GEIGY AG BASEL SCHWEIZ

Inventor(s):(std)**:** FELIX ROUSSELOT ; ROUSSELOT F ; ROUSSELOT FELIX

Inventor(s): ROUSSELOT FELIX LIGUGE VIENNE FRANKREICH

Agent(s): REINHOLD COHN AND PARTNERS

International class (IPC 8-9): A45D33/00 B05B11/00 B05B7/14 B65D83/06 B65G53/06 (Advanced/Invention)

International class (IPC 1-7): A01M9/00 A01M9/00 A01M9/04 A61M11/00 A61M13/00 B05B11/00 B05B7/00 B05B7/04 B05B7/10 B05B7/14 B05B7/26 B05B7/30 B65D83/06 B67D5/54

CPC: B05B7/1413

European class: B05B7/14A4

US class: 128/200.23 128/203.15 222/193 222/635

Classification Explorer

Cited documents: US421942 A, US3237805 A, US3162332 A, US2801880 A, US2615693 A, US2560093 A,

Forward Citations: WO9204070, WO8803419, WO02092154, US7980243, US7793655, US7341056, US7213593, US7025058, US6698422, US6681763, US6575160, US6397837, US5669376, US5597095, US5533498, US5476093, US5018647, US2009211576, US2007056586, US2006213514, US2003197122, US2003015191, JP6023048, JP4371660, JP3229887, JP2004526540, GB2302513, GB2152344, EP0475257, AU646885,

Abstract:
Source: US3625403A An aerosol-type **dispenser** for **dispensing** a powdered material. The **dispenser** has a propellant **container**, valve means operatively associated with said propellant **container** for controlling release of propellant from said propellant **container**, and a product-containing chamber for containing the powdered material to be **dispensed**. A fluidization chamber is mounted on one end of said product-containing chamber and said product-containing chamber **opens** into it. The propellant **container** is mounted on said fluidization chamber and said valve means discharges into said fluidization chamber. The fluidization chamber has an outlet orifice therein, the propellant **container** is mounted on said fluidization chamber with the axis thereof at an oblique angle to the axis of said product-containing chamber, whereby when the **dispenser** is held with the product-containing chamber above the propellant-containing **container**, the powdered material is fed to the fluidization chamber by gravity.

PatBase - US3625403_A

PATENTED DEC 7 1971

3,625,403

SHEET 1 of 5

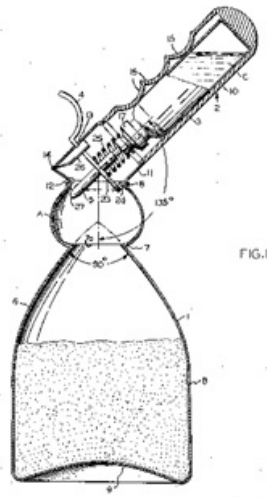


FIG. 1

INVENTOR
FELIX HOUSSELOT

BY Woodcock, Washburn, Kurtz & Mackiewicz
ATTORNEYS

278) Family number: 946775 (US3456419A)

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Title: METHOD AND MACHINE FOR FORMING AND FILLING CARTONS

Priority: US19650461738 19650607 US19680711967 19680311 US19680712203 19680311

Family:

Publication number	Publication date	Application number	Application date
US3456419 A	19690722		19650607
US3566762 A	19710302		19680311
US3568734 A	19710309	US19680712203	19680311

Probable Assignee: FMC CORP

Assignee(s):(std)**:** FMC CORP ; JAMES A LEWIS

Assignee(s): F M C CORP

Inventor(s):(std)**:** DRAKE ROBERT W ; VADAS LESLIE

Inventor(s): LESLIE VADAS ; ROBERT W DRAKE

International class (IPC 8-9): B31B5/78 B65B3/02 (Advanced/Invention); B31B5/00 B65B3/00 (Core/Invention)

International class (IPC 1-7): B31B1/02 B31B1/76 B31B3/26 B65B3/02 B65B3/12 B65B43/00 B65B57/02

CPC: B65B3/025 B31B50/004 B31B50/78 B31B2100/00 B31B2120/30

European class: L31B201/28A L31B201/29 L31B203/00A

US class: 141/140 141/147 141/152 141/263 141/89 198/379 414/788.8 493/126 493/133 493/134 493/164 493/176 493/182 493/184 493/29 493/317 53/131.4 53/284.5 53/290 53/370.9 53/458 53/484 53/565 53/64 93/44.1

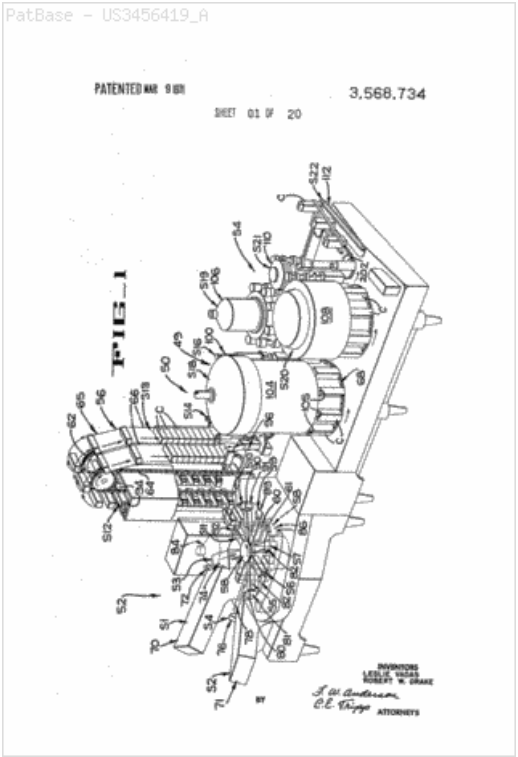
Classification Explorer

Cited documents: US3405505 A, US3382775 A, US3322043 A, US3252386 A, US3207049 A, US3120089 A, US3105525 A, US2750721 A, US2374268 A, US1778216 A, US1512764 A, AU110198 A1,

Forward Citations: WO9609961, US9862508, US9533785, US9481001, US8882073, US6889482, US6786248, US6779318, US6422375, US6305437, US6209704, US6101786, US6066081, US6042527, US5976317, US5871430, US5618253, US5469690, US5209044, US5120292, US4621485, US4602964, US4516381, US4501622, US4448013, US4378080, US4311476, US3978900, US3825408, US3824702, US3695486, US3693674, US2016114913, US2015139772, US2012056066, US2011165833, US2007048476, US2007045967, US2007044906, EP0597355, EP0283297, EP0283297, EP0249264, EP0249264, EP0242805, EP0242805, EP0187468, EP0100969, DE3531728, DE102015114380, DE102015104102, DE102013015638, AU704677,

Abstract:

Source: US3456419A (Claim 1) 1. A machine for forming and filling cartons each of which includes a bottom **closure** and a stop **closure**; t-he combination of a forming section having means for erecting cartons from carton blanks and having means for **sealing** the bottom **closures** of each carton; an accumulating section including a vertically extending accumulating conveyor driven at a predetermined speed, a plurality of evenly spaced carriers on said conveyor, means for transferrin.- cartons ftom said forming section onto said carriers, and a carton acciimulating guideway for receiving cartons from said conveyor and for accumulating a verti- cal stack of abutting cartons; a filling section including means for filling each carton and means for **sealing** the top **closure** of each c_irton, and means for transferring the cartons from said stack to said filling section at a speed determined by the demand for cartons from said filling section.



279) Family number: 716968 (US3456780A)

Title:	QUICK-**OPENING** SHRINK FILM **PACKAGE**
Priority:	US19670681854 19671109

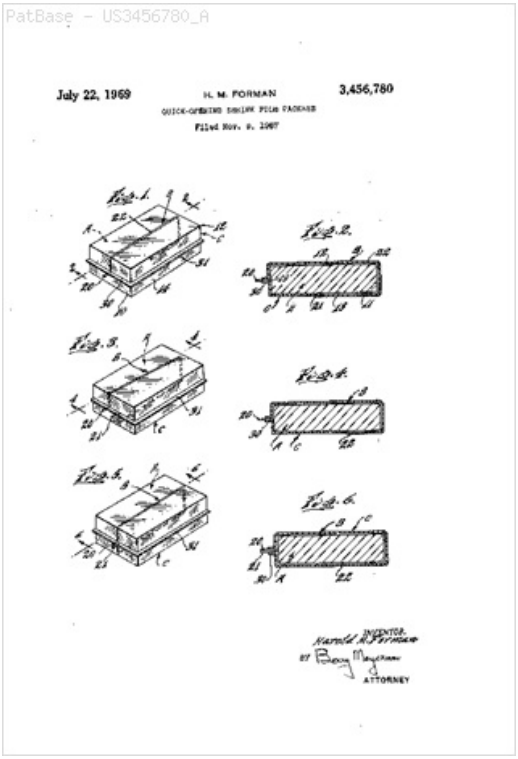
Family:

Publication number	Publication date	Application number	Application date
GB1200960 A	19700805	GB19680053293	19681111
US3456780 A	19690722	US19670681854	19671109

Probable Assignee:	HAROLD M FORMAN
Assignee(s):(std):	FORMAN HAROLD MORTON ; HAROLD M FORMAN
Assignee(s):	HAROLD MORTON FORMAN
Inventor(s):(std):	FORMAN HAROLD M ; FORMAN HAROLD MORTON
Inventor(s):	HAROLD M FORMAN ; HAROLD MORTON FORMAN
International class (IPC 8-9):	B65D75/68 (Advanced/Invention); B65D75/00 (Advanced/Non-invention); B65D75/52 (Core/Invention); B65D75/00 (Core/Non-invention)
International class (IPC 1-7):	B65D17/00 B65D5/54 B65D5/70 B65D85/00
CPC:	B65D75/002 B65D75/68
European class:	B65D75/68 L65D75/00B
US class:	206/46 206/497 227/51 383/206
Classification Explorer	
Cited documents:	US3352480 A, US3338404 A, US3254758 A, US3188215 A, US3061169 A, US2956886 A, US2870953 A, US2684877 A, US1684421 A, US1630542 A, US147697 A,
Forward Citations:	WO0247999, US6311843, US6206194, US6158589, US6016919, US5966898, US5480302, US5466500, US5407354, US5348219, US5201463, US5192262, US5067612, US4947994, US4938363, US4903843, US4650079, US4306657, US4300328, US4067810, US3906702, US3873018, US3668061, US2007298892, US2004127340, US2002162766, JP58180159,

Abstract:

Source: US3456780A ABSTRACT OF THE DISCLOSURE
Quick **opening** of **packages** comprising an item over-wrapped with tensioned heat-shrunk axially oriented thermoplastic film and having at least one **sealed** edge is 15 made possible by providing a cutter between the film and the overwrapped item, said cutter extending longitudinally about the item and having one end which extends outwardly through the **sealed** edge. The other end of the cutter is frictionally detented so that by pulling 20 the end which extends back toward the detented end, progressive cutting of the film is achieved. CROSS-REFERENCE TO RELATED APPLICATION This application is a continuation-in-part of application Ser. No. 547,509 filed May 4, 1966, entitled, "Quick-**Opening** Shrink Film **Package** and **Packaging** Method," now Patent No. 3,352,480 which issued on Nov. 14, 1967. 30 B



280) Family number: 874829 (US3456849A)

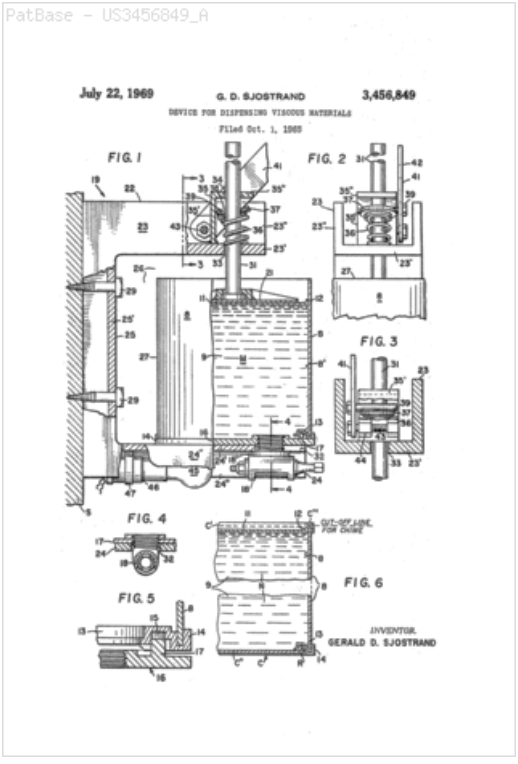
Title:	DEVICE FOR **DISPENSING** VISCOUS MATERIALS
Priority:	US19650492148 19651001

Family:

Publication number	Publication date	Application number	Application date
US3456849 A	19690722	US19650492148	19651001

Probable Assignee:	GERALD D SJOSTRAND
Assignee(s):(std):	GERALD D SJOSTRAND
Inventor(s):(std):	SJOSTRAND GERALD D
Inventor(s):	GERALD D SJOSTRAND
International class (IPC 8-9):	B29B13/02 F16N13/08 (Advanced/Invention); B29B13/00 F16N13/00 (Core/Invention)
International class (IPC 1-7):	B67D1/02 B67D5/62 E01C19/08
CPC:	B29B13/022 F16N13/08
European class:	B29B13/02C F16N13/08
US class:	222/146 222/146.1 222/146.5 222/181.2 222/327 222/391
Classification Explorer	
Cited documents:	US2758758 A, US2602571 A, US2582156 A, US2512178 A, US2252101 A, US2090111 A, US1977831 A, US1476227 A, GB878456 A,
Forward Citations:	US6715648, US5297702, US4978042, US4898302, US4824355, US4790456, US4714425, US4693398, US4316558, US4231492, US3758003, US3706400, US2008054024, US2003019887,

Abstract:
Source: US3456849A 1. In combination with a charge of viscous material which is adapted to have its fluidity increased by heating and is originally **sealed** Within an original rigid tubular **container** having a uniform bore and an **openable** **sealing** **closure** at one end of its side wall and a **sealing** **closure** member at the other Wall end having a disc portion pe» ripherally and closely litting within the **container** bore and originally attached to the latter wall end in **sealed** relation thereto by an outturned integral peripheral U-bend portion of said latter **closure** member radially and **sealedly** gripping the received **container** Wall end, with its disc portion comprising a unitary element which has been freed by a peripheral elimination of the bight portion of said attaching U-bend of the latter **closure** a member and solely includes said disc portion and said integrally attached inner U-bend side to provide for its guided movement within the wall bore of the **container** as a **dispensing** pressure plate against the material charge within the wall bore; a support frame providing rigidly spaced lowcr and upper support members transversely defining between them a laterally **open** space for freely receiving thc charged said **container** between them with the first end of the **container** seated on the lower frame member in Hxed angular relation thereto, a piston rod supported by and depending below the upper frame member and carrying at its bottom end a piston for axial movement against said flanged pressure plate in the bore of the mounted **container** for forcibly advancing the iianged said plate against the opposed end of the material charge in the **container** to extrudc the material through the **opened** said other end **closure**, a means directly cooperative between the piston rod and ripper frame member to project the piston against the pressure plate for intermittently and progressively extruding the material downwardly through the **container** and from said **opened** end **closure** at me seated **container** end; the lower member of the support frame cngagcd by a **container** end seated thereon being of heat-conducting material and intermcdiately providing a downwardly-directed **opening** for delivering the material discharged through and from the seated end of the **container** thereon, and is further provided on its under side with a heat-emanating means for heating the charge in thc **container** through said lower frame member for increasing its liuidity thereat to facilitate its delivery through the said **opened** end **closure**.



281) Family number: 268768 (US3535712A)

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Title: TOILET AND WASTE **STORAGE** SYSTEM

Priority: US19670692062 19671220 US19680761731 19680923

Family:

Publication number	Publication date	Application number	Application date
DE1816518 A1	19690724	DE19681816518	19681218
FR1599386 A	19700715		19681220
GB1255617 A	19711201	GB19680060527	19681219
JP50008264 B4	19750403	JP19680093188	19681220
US3535712 A	19701027	US19670692062	19671220
US3536196 A	19701027	US19680761731	19680923

Probable Assignee: GEN AM TRANSPORT

Assignee(s):(std)**:** GEN AM TRANSPORT

Assignee(s): GENERAL AMERICAN TRANSPORTATION CORP ; CHAMBERLAIN MFG ; CHAMBERLAIN MFG CORP

Inventor(s):(std)**:** C ROBERTS GEORGE ; D ZEFF JACK ; ROBERTS GEORGE C ; ZEFF JACK D

Inventor(s): GEORGE C ROBERTS ; JACK D ZEFF

International class (IPC 8-9): A47K11/02 E03D5/016 (Advanced/Invention); A47K11/00 E03D5/00 (Core/Invention)

International class (IPC 1-7): A47K11/02 B03D3/00 B63B29/14 B63B29/16 B64D11/02 E03D1/00 E03D11/10 E03D5/016

CPC: Y10S4/19 Y10S4/13 E03D5/016

European class: E03D5/016

US class: 210/97 4/10 4/316 4/317 4/320 4/322 4/323 4/DIG.13 4/DIG.19

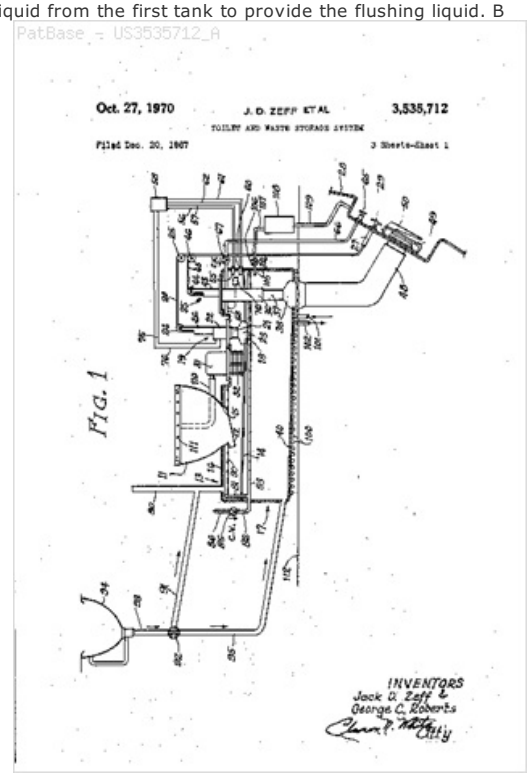
Locarno class: 4 /10

Classification Explorer

Cited documents: US3401115 A, US3320621 A, US3172131 A, US3169497 A, US3067433 A, US2858939 A, US2798228 A, US2798227 A, US1303358 A,

Forward Citations: US9751787, US8640269, US8429900, US7867336, US7546981, US7005077, US6776183, US6317898, US6038710, US5634217, US5313677, US5210886, US4332041, US4202061, US4041737, US3998736, US3927425, US3922729, US3815159, US3787901, US3643265, US3642135, US2016107910, US2010032032, US2009025756, US2004217103, JP2006036206, EP1621459, EP1621459, DE10037318, CN105544689, CN102535610,

Abstract:
Source: US3535712A ABSTRACT OF THE DISCLOSURE
A system that receives and treats waste from and furnishes flushing liquid to a toilet includes first and second tanks, a valved conduit between them to maintain waste in the first tank within two predetermined levels. The first tank receives waste from a toilet. In the second tank a heater removes at least some of the aqueous content of the waste and part may be condensed to provide flushing liquid. Preferably, a filter and a pump withdraw filtered liquid from the first tank to provide the flushing liquid. B



282) Family number: 163140 (US3458111A)

Title: PACKAGE

Priority: CH19680013136 19680902 US19670692568 19671221

Family:

Publication number	Publication date	Application number	Application date
CH499430 A	19701130	CH19680013136	19680902
CH524507 A	19720630	CH19700013831	19680902
DE1815288 A1	19690724	DE19681815288	19681218
FR1586218 A	19700213		19680917
GB1225193 A	19710317		19680715
JP53012880 B1	19780504	JP19680057718	19680815
JP53012880 B4	19780504	JP19680057718	19680815
SE333896 B	19710329	SE19680017310	19681218
US3458111 A	19690729	US19670692568	19671221

Probable Assignee: MIRA PAK MACHINERY CO INC

Assignee(s):(std)**:** MIRA PAC INC ; MIRA PAK INC

Assignee(s): MIRA PAK MACHINERY CO INC

Inventor(s):(std)**:** ANDREWS JOHN D ; C LEASURE WILLIAM ; LEASURE W ; LEASURE WILLIAM C ; WILLIAM C LEASURE

Inventor(s): JOHN D ANDREWS

International class (IPC 8-9): B65D33/38 B65D75/44 B65D75/58 B65D75/62 (Advanced/Invention); B65D75/12 (Advanced/Non-invention); B65D33/36 B65D75/00 B65D75/52 (Core/Invention); B65D75/04 (Core/Non-invention)

International class (IPC 1-7): B65D33/00 B65D33/16 B65D33/36 B65D5/02 B65D5/10 B65D5/54 B65D5/70 B65D5/72 B65D5/74 B65D7/70 B65D85/72

CPC: B65D75/12 B65D75/5822

European class: B65D75/58D1 L65D75/12

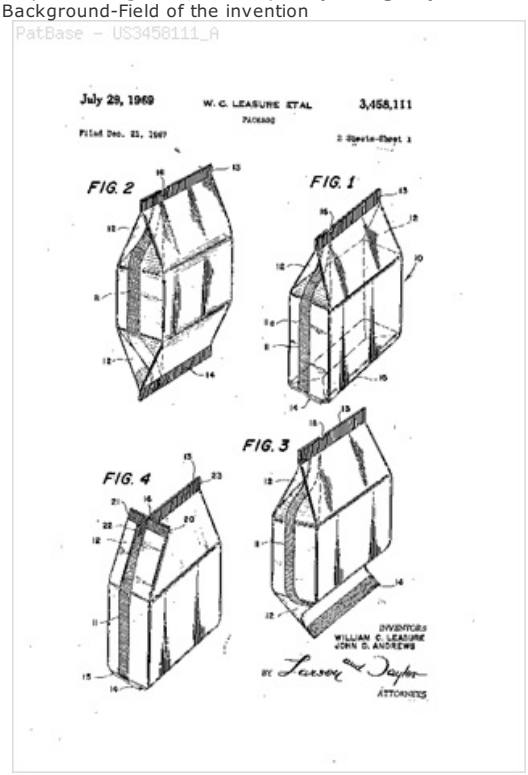
US class: 229/17 383/201 383/94

Classification Explorer

Cited documents: US3339820 A, US3331692 A, US3314591 A, US3051368 A,

Forward Citations: WO9912812, WO8500031, USD652320, US9315299, US6957915, US6715919, US5738211, US4964515, US4834241, US4795270, US4568018, US4239639, US3998380, US3834113, US3795359, US3791570, US3743165, US3734388, US3663239, US3659775, US2013316887, US2008260304, US2003179957, US2003035598, GB2227937, GB2227937, FR2548137, EP0338253, DE9407294, DE3824753,

Abstract:
Source: US3458111A ABSTRACT OF THE DISCLOSURE
A **package** formed from a flat length of material, the edges of which length are connected together along a longitudinally extending **seal**. The **package** includes opposing gussets, one of which contains the longitudinally extending **seal**. The **package** is **opened** by separating the sides of the gusset and pulling the longitudinally extending **seal**, whereby the **package** **opens** and the gusset forms a pour spout. The bottom of the **package** may be flat. Background-Field of the invention



283) Family number: 19215402 (US3773047A)

Title: DISPOSABLE SYRINGE

Priority: US19680704105 19680208 US19690795574 19690131 US19710153885 19710616 US19720304038 19721106 US19720304115 19721106

Family:

Publication number	Publication date	Application number	Application date
CA945860 A1	19740423	CA19690042342	19690207
DE1905961 A1	19690911	DE19691905961	19690206
DE6904609 U	19690807	DE196940046090	19690206
DK123913 B	19720821	DK19690000709	19690210
ES363320 A1	19701216	ES19690363320	19690205
FR2001546 A1	19690926	FR19690002789	19690207
GB1262926 A	19720209	GB19690006179	19690205
NL6902089 A	19690812	NL19690002089	19690210
SE384801 B	19760524	SE19690001627	19690206
SE384801 C	19760902	SE19690001627	19690206
US3773047 A	19731120	US19720304038	19721106
US3892311 A	19750701	US19720304115	19721106

Probable Assignee: SNEIDER

Assignee(s):(std)**:** SNEIDER ; SNEIDER V ; SNEIDER V R ; SNEIDER VINCENT ; SNEIDER VINCENT R ; SNEIDER VINCENT RAYMOND

Assignee(s): VINCENT RAYMOND SNEIDER ; SNEIDER V US

Inventor(s):(std)**:** RAYMOND SNEIDER VINCENT ; SNEIDER V ; SNEIDER V R ; SNEIDER VINCENT R ; SNEIDER VINCENT RAYMOND

Inventor(s): VINCENT RAYMOND SNEIDER ; SNEIDER V US

International class (IPC 8-9): A61M3/00 A61M3/02 A61M5/31 (Advanced/Invention); A61M3/00 A61M5/31 (Core/Invention)

International class (IPC 1-7): A61M1/00 A61M3/00 A61M5/00 A61M5/31 A61M7/00 A61M7/02 B05B15/00 B05B9/04 B65D79/00

CPC: A61M3/0262 A61M3/00 A61M5/31

European class: A61M3/00 A61M3/02D8C A61M5/31

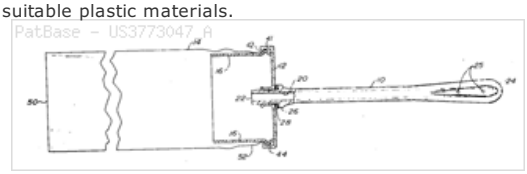
US class: 128/232 206/229 206/364 604/197 604/212 604/275 604/911

Classification Explorer

Cited documents: US3693783 A, US3495706 A, US3474788 A, US3469571 A, US2859891 A, US2664893 A, US2643448 A, US2524021 A, US2508481 A, US2313512 A, US2299710 A,

Forward Citations: WO14011417, WO10115430, WO0024332, US8852171, US8641687, US8609612, US8551944, US7475438, US5695481, US5390814, US5361976, US4955871, US4622704, US4487336, US3993070, US3986509, US2013017994, US2008119803, US2007132142, US2007000041, EP2275058, EP2016970, DE3139326,

Abstract:
Source: US3773047A This invention relates to a disposable syringe in which a nozzle portion is detachably attached to an end **closure** member having a tubular portion and a cap portion. A flexible **bag** is mounted on the tubular portion. In a disassembled array the syringe device may be **packaged** in a cardboard carton, plastic **bag** or the like for shipping and/or **dispensing**, as by means of a vending machine. The components are arranged in a small **package**. After assembly and use, the complete **unit** or merely the **bag** may be disposed of, as desired. As conceived and constructed, the low cost of the disposable syringe is accomplished by having the components adapted for mass production of suitable plastic materials.



284) Family number: 747782 (US3548722A)

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Title: MANUFACTURE OF VALVE **BAGS**

Priority: GB19670038464 19670821 GB19670038468 19670821

Family:

Publication number	Publication date	Application number	Application date
AU206842039 A1	19700219	AU19680042039	19680813
CH507807 A	19710531	CH19680012518	19680820
FR1577706 A	19690808		19680821
GB1232028 A	19710519		19670821
IL30569 A0	19681024	IL19680030569	19680816
IL30569 A1	19730228	IL19680030569	19680816
US3548722 A	19701222		19680816

Probable Assignee: CANADIAN IND

Assignee(s):(std)**:** CANADIAN IND

Assignee(s): CANADIAN IND LTD ; CANADIAN INDUSTRIES LIMITED

Inventor(s):(std)**:** EDWARD KENNETH ROWLEY ; ELWYN DAVID JONES ; JONES ELWYN DAVID ; REYNOLDS SHEPHERD DOUGLAS ; ROWLEY EDWARD KENNETH ; SHEPHERD DOUGLAS REYNOLDS

Inventor(s): ELWYN DAVID JONES EDWARD KENNETH ROWLEY AND DOUGLAS REYNOLDS SHEPHERD ; KENNETH ROWLEY EDWARD ; DAVID JONES ELWYN ; DOUGLAS REYNOLDS SHEPHERD

Agent(s): S HOROWITZ AND CO

International class (IPC 8-9): B31B1/84 B31B29/84 (Advanced/Invention); B31B29/00 (Core/Invention)

International class (IPC 1-7): B31B1/00 B31B21/00 B31B37/74

CPC: B31D5/0034 B31B70/844 B31B2150/00 B31B2160/20

European class: B31B29/84 B31D5/00B L31B219/90J1 L31B221/20

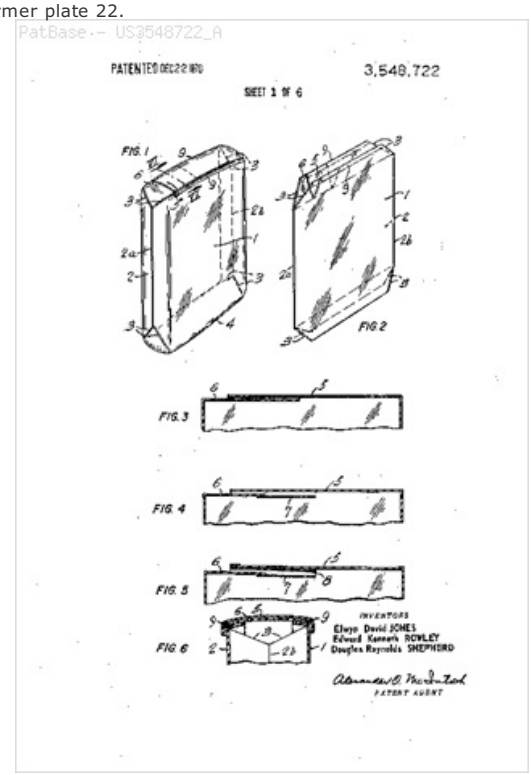
US class: 383/54 493/11 493/196 493/209 493/213 93/8

Classification Explorer

Forward Citations: US5538573, US4783178, US4725262, US4636190, US4561107, US4551125, US4526565, US4481669, US4273549, US3646856,

Abstract:

Source: GB1232028A 1,232,028. Making valve **bags**. CANADIAN INDUSTRIES Ltd. 5 Aug., 1968 [21 Aug., 1967], No. 38464/67. Heading B5D. In a machine for making valve **bags** such as disclosed in Specification 1,211,696 a folded web 16, Fig. 8, of heat-**sealable** plastics film has overlapping valve panels 21 **sealed** along the **open** edges at 17 and 26 to form a tube. Gussets are formed at the sides of the tube by wheels 27, 28, 30 and V-shaped and transverse **seals** made. The plastics web is advanced in **units** of one **bag** width by drive rollers 33 which are governed by a photo-electric cell responding to marks printed on the film web. The tube is then cut into separate **bags**. Alternatively the machine can be arranged to form pillow-type **bags**. Valve panel insertion.-Film from reel 19, Fig. 10, overlaps thinner film from reel 18 at roller 43 and both pass through a **sealing** device 20 to join them at the overlap. The **sealer** 20 consists of a heat **sealing** element 45 which acts against an anvil attached to plate 50 and is activated by an air piston and cylinder 48 acting against springs 49. The **sealed** film passes between metering rollers 51, 52, each of which mesh together by spur gears 57, 58, Fig. 12, and are rotatably mounted on freely rotating shaft 53 and fixed shaft 54 respectively by unidirectional clutches 83, 84. The draft 53 is driven by a pinion 76 and rack 75 the extremity of which carries a rod 80 and adjustable collar 81 coacting with stop 82 to limit the throw of the rack 75 and thus meter the plastics film. The rack 75 is activated by air cylinder 77. Each end of shaft 53 carries spur gears 59 which engage racks 60 sliding in guide 61 to advance a film support plate 62 when the metering rollers discharge a length of valve panel. The film then advances between clamping element 63 and cutting member 65 until the edge lies over the anvil 86 and underneath the edge of the lower layer of the web 16 and the trailing edge of the preceeding valve panel 21. The leading edge of the valve panel is then heat **sealed** to the edge of the lower ply web 16 by element 87 acting against the anvil 86 and actuated by air cylinders 92, 93 through the frame 88. Air cylinder 67 clamps member 63 against the cutting member 65 and air cylinder 74 actuates a knife 70 to cut off the panel to the required length. The web 16 is advanced and a folding device 24, Fig. 8, folds the valve panel 21 over the upper layer of the web 16, to be heat **sealed** thereto at 25 by element 26 acting on former plate 22.



285) Family number: 490758 (US3809777A)

Title: METHOD FOR COOKING FOODSTUFFS

Priority: US19670665478 19670905 US19680747760 19680701 US19710185183 19710930

Family:

Publication number	Publication date	Application number	Application date
AU206841445 A1	19700205	AU19680041445	19680731
DE1779614 A1	19711202	DE19681779614	19680903
DE1779614 C2	19831208	DE19681779614	19680903
FR1577923 A	19690808		19680905
GB1186304 A	19700402	GB19680036084	19680729
IT1021502 A	19780220	IT19680038847	19680801
JP49028416 B4	19740726	JP19680061251	19680828
SE341514 B	19711227	SE19680011970	19680905
US3613550 A	19711019	US19680747760	19680701
US3809777 A	19740507	US19710185183	19710930

Probable Assignee: SMALL BUSINESS ADMINIST

Assignee(s):(std)**:** SMALL BUSINESS ADMINIST ; THOMPSON N ; THOMPSON NEAL W ; THOMPSON NEAL WEST

Assignee(s): THOMPSON NEAL W MONROEVILLE PA US ; SMALL BUSINESS ADMINISTRATION ; THOMPSON N US ; NEAL W THOMPSON ; NEAL WEST THOMPSON

Inventor(s):(std)**:** THOMPSON NEAL W ; THOMPSON N ; THOMPSON NEAL WEST ; W THOMPSON NEAL

Inventor(s): THOMPSON NEAL W MONROEVILLE PA US ; THOMPSON N US ; NEAL W THOMPSON ; NEAL WEST THOMPSON

International class (IPC 8-9): A23L1/01 A23L1/31 A23L1/315 A23L1/325 A23L13/00 A23L13/50 A23L17/00 A23L5/10 A47J27/08 A47J37/12 (Advanced/Invention);
A23L1/01 A23L1/31 A23L1/315 A23L1/325 A47J27/08 A47J37/12 (Core/Invention)

International class (IPC 1-7): A22C18/00 A23L1/00 A23L1/01 A23P A47J27/08 A47J27/086 A47J27/62 A47J37/12

CPC: A47J27/0817

European class: A47J27/08R

US class: 426/438 426/509 99/330 99/333 99/408 99/416 993/300

Classification Explorer

Cited documents: US3501316 A, US3466997 A, US3431835 A, US3431834 A, US3364845 A, US3314416 A, US3280722 A, US3259521 A, US3245800 A, US3210193 A, US3194662 A, US3187664 A, US3071063 A, US2827379 A,

Forward Citations: WO8904131, WO13126917, USRE33712, US9839230, US9682300, US9462819, US9392907, US9156390, US7704387, US6626088, US6626087, US5721001, US5101714, US4968516, US4710391, US4502372, US4179986, US4169408, US4164590, US4123560, US3966983, US3944678, US3861286, US3853044, US3800692, US3793940, US2013157785, US2012251695, US2012093990, US2008060528, FR2622783, EP0410666, DE3427730, DE3222241, DE2801559, DE2528901,

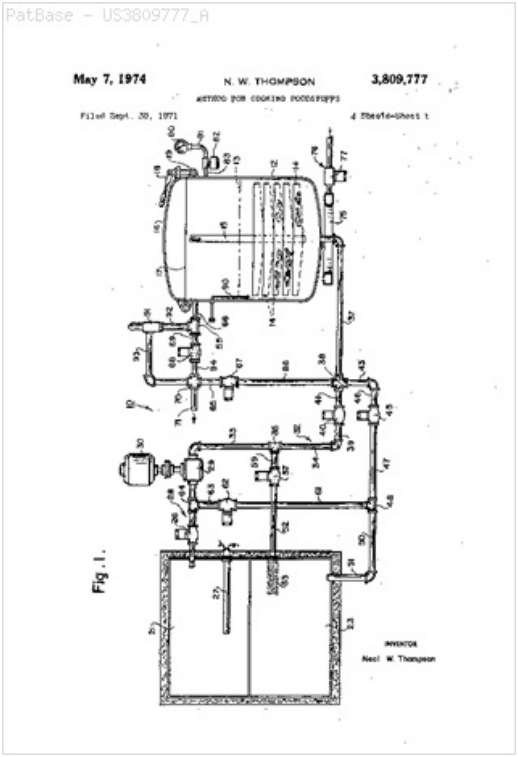
Abstract:

Source: US3809777A ABSTRACT OF THE DISCLOSURE A method for cooking foodstuffs by immersing them in a heated liquid cooking medium contained in a pressure vessel, closing the vessel and relieving the pressure therein when it reaches a predetermined high limit. The pressure is then relieved to a low limit. The cycle is repeated until the foodstuffs are cooked. The cooking medium is then discharged from the vessel under the urging of the pressure of the steam remaining in the vessel. Upon complete discharge of the cooking medium, the vessel is completely vented of residual steam. The discharged cooking medium, if desired, is filtered of all solid residue and is then ready for reuse. SPECIFICATION This application is a continuation-in-part of U.S. patent application Ser. No. 665,478, filed Sept. 5, 1967, now abandoned and a divisional application of my pending U.S. patent application Ser. No. 747,760, filed July 1, 1968, now Pat. No. 3,613,550 issued Oct. 19, 1971. A well known method of preparing certain foodstuffs, such as chicken, sea food, various kinds of meats, and the like is to immerse these foodstuffs in hot shortening or fat and cook the foodstuffs until done. This type of food preparation is commonly called deep frying. Establishments handling large quantities of food often resort to such deep frying under pressure. Pressure type deep frying permits the food to be prepared in relatively short time as compared to **open** type deep frying. One problem is common to both the **open** type and pressure type of deep frying systems, namely, the shortening or fat has a limited useful life and must be completely replaced at regular intervals. The reason for this limited life is that after a certain period of use the fat breaks down, characterized by foaming, a dark -amber color, off flavor, smoking, and formation of gums and residues. This break down of the fat is due to the chemical formation therein of a high degree of free fatty acids. These adverse and destructive free fatty acids have been attributed to the breakdown of the chemical bond between the glycerine and fatty acids which make up the fat. This breakdown is due mainly to hydrolysis, the presence of contaminating impurities in the fat, and sustained use of impurity contaminated fat at high temperatures. The impurities often found in the fat are derived in large part from the food being prepared. For example, chicken during deep frying will release, among other things, a product commonly called glue. Residual blood remaining in the chicken may also be released. In addition to the glue and blood, flour, bread particles, salt, spices and the like forming parts of the **covering** or breading applied to the chicken will also enter into the fat as part of the total impurities. Straining and filtering of the fat helps to add to the effective life of the fat. However, most of the filtering systems, aside from being elaborate, expensive, and awkward cannot effectively prevent breakdown of the fat since the destructive free fatty acids are formed, while the fat is being used at high temperatures to fry food and remain in solution with the fat and cannot be filtered out. Oftentimes the fat is not permitted to be used until it completely breaks down but is replaced on a regular basis, usually on the basis of change in color. The reason for this is that the contaminated fat, if not replaced, will give the food an undesirable off flavor and unattractive appearance, and this is attributed to the high degree of free fatty acids in the fat, and the adhesion of carbon particles already formed, as well as the other suspended impurities to the foods. In addition to causing breakdown of the fat, the impurities transfer an odor or off flavor to the fat, such odor or off flavor being characteristic of the particular food being prepared. For example, the fat used for preparing chicken would smell like the chicken. Odorous fat cannot be used in preparing other foods due to the danger of the odor of one food being transferred to the other food (viz. fishy smelling chicken). The rate of formation of free fatty acids due to the presence of impurities and moisture in the fat is accelerated when the fat is used at sustained high temperatures. Accordingly, the temperature of the fat is kept relatively low during cooking (e.g., 325 to 3500 F.). The cooking time for the food product is necessarily lengthened as compared with fat used at higher temperatures. As mentioned earlier, hydrolysis is a cause of fat breakdown and is due to excess water in the fat. An excessive amount of water in the fat also results in the rapid generation of steam as the fat is heated to high temperatures. This rapid generation of steam causes violent sputtering which is dangerous to anyone who might be near an **open** fryer. The sputtering caused by the generated steam also carries some of the fat away to be thus wasted. In order to avoid sputtering by generated steam when deep frying refrigerated foods, a common practice has been to preheat or blanch the refrigerated foods to drive off some of its moisture. Aside from necessitating an additional procedure in preparing these refrigerated foods, this preheating is unsanitary and can result in food contamination. Some states have recognized this unsanitary danger of pre-heating refrigerated foods by prohibiting restaurants and the like from pre-heating refrigerated foods prior to cooking. Water also plays an important favorable role in deep frying operations and particularly in pressure deep frying. The steam generated from the moisture in the foods being fried circulates through the fat and contacts the food to restore the lost moisture thereby resulting in a tender, moist and tasty food product. An additional problem arises here, however, and especially in pressure frying in that the steam, if not properly controlled, can cause the food to become over-cooked. In the case of chicken, for example, the meat can fall away from the bones if overcooked. If the steam is generated too rapidly in **open** deep frying, and thereby not permitted to circulate about the food, the food will tend

to char since it will be getting too much heat too fast. Therefore, the temperature of the fat during cooking cannot be raised too high. One other problem common to both **open** type and pressure type deep frying is that the food product absorbs and retains a certain amount of fat which detracts from the taste of the food as well as being another source of fat waste. The amount of fat absorbed by the food product increases as the length of cooking time increases. The cooking times currently used are unnecessarily long because of the necessity of using low fat temperatures, as indicated previously. Conscientious restaurants oftentimes use a degreaser or defatter for removing the residual fats in the food products. Degreasing adds a time consuming step to the food processing procedure, with the degreasers or defatters having the additional disadvantages of being ro expensive and bulky. Pressure type deep fryers are always explosion problems, especially if operated at very high pressures such as above 35 p.s.i.g. Furthermore, the food product resulting from the use of the pressure fryers extant are not satisfactory, due mainly to the water and impurities mentioned earlier. The dissatisfaction with high pressure fryers is demonstrated by the scarcity of use of these known pressure fryers. The pressure deep fry systems commonly used are also limited in the amount of food product which can be prepared in individual vessels. One process extensively used is limited in the amount of food prepared in each con- 1 tainer to about five pounds. This limited capacity has necessitated the use of a large amount of **containers** individually heated on **open** gas burners in order to meet the demand for food product. After the food is prepared by this process, the individual **container** is **opened**, fat laden 1 steam is released, and the **container** hand carried to a strainer vat and dumped of all its contents. The fat soaked finished food product is then put into a defatter before being served. Needless to say, the just described process is inefficient, wasteful of valuable cooking fat, dangerous 2 to operators who have to **open** the **containers** and carry them to the strainer vats, very expensive to operate, and other deficiencies too numerous to mention. Pressure cooking is also used for preparing other food products, such as stewed chicken, pot roasted beef, vege- 2 tables, and dough products, for example, with water being used as the cooking medium. The water is either discarded or used as gravy stock, in the case of meats, after the cooking of the products is completed. In the case of pressure cookers used to date, any contaminating foreign mat- 31 ter on the products tends to recirculate about the cooking vessel and either remain on the product, in the water, or on the walls of the vessel. In other words, there is no way for foreign matter to escape from the cooking vessel during cooking. 3 I have overcome the problems indigenous to the commonly used deep frying cookers and to pressure cookers using a liquid cooking medium by providing a new-method for cooking comprising, preferably, the steps of: immersing foodstuffs in -a **sealable** pressure vessel containing a 4(liquid cooking medium at a temperature sufficient to cook the foodstuffs; closing the vessel to render it pressure-tight; heating the cooking medium until the pressure in the vessel increases to a first value; relieving the pressure in the' vessel from the first value to a second value to release a portion of steam; continuing the relieving and the heating 4l until the foodstuffs are cooked; discharging the cooking medium from the vessel; and venting the vessel of all of the steam therein upon completion of the discharging of the cooking medium. My method results in a rapidly prepared food product which is clean, tasty, tender, free from 5o residual cooking medium and appetizing in appearance. When shortening is used as the cooking medium there is very little loss of the shortening due to sputtering and/or adherence to the food and, more importantly, the shortening discharged from the vessel is free of a large portion of deleterious free fatty acids which would otherwise react to break it down and to give the shortening the odor of the food being prepared. The shortening can thus be reused with different food 'without danger of transferring odorous compounds from one food to another. Moreover, the discharged shortening can be reused over an indefinite period of time at a considerable savings in operating costs. When either shortening or water is used as the cooking, medium a large portion of lightweight foreign matter which may have been on the surface of the food or in the cooking medium or in the food itself is removed during the pressure relieving steps. Thus, the product, cooking medium and cooking vessel emerge clean after the completion of the cooking cycle. The water cooking medium can, if desired, be either used as stock for gravy, in the case of cooking meats in water, or discarded. Additionally, my method is more than reasonably safe since it can be operated at a relatively low pressure as compared to thepressure cooking systems known today. Also, certain test results have shown that the mercury contents in various fish such as tuna and swordfish have been reduced by being cooked following the steps of my method. Finally, my method can be used with small or large quantities of foodstuffs and provides a thoroughly and uniformly cooked product throughout the entire mass of product in the cooking vessel. Other details, objects and advantages of the invention will become apparent as the following description of a present preferred method of practicing my invention. In the accompanying drawings, I have illustrated a present preferred method of the same in which:. Fig. 1 is a side elevational view partly in section and partly diagrammatical of one pressure cooking system for practicing the present invention; Fig. 2 is a schematic representation of a typical control system for use with the present invention; FIGS. 3-7 show schematic representations of foodstuffs being prepared in accordance with the present invention; and Fig. 8 is a schematic representation of another pressure cooking system for practicing the present invention. Referring now to the drawings wherein like reference numerals refer to like parts throughout the views, generally represents one embodiment of a pressure type deep fry system for practicing the present invention. For purposes of clarity of description the deep fry system will be considered as a system for preparing chicken sections by using the familiar, non-aqueous vegetable shortening or fat as the cooking medium. The shortening will hereinafter be called fat. As illustrated, the deep fry system 10 includes a generally cylindrical high pressure, large capacity (viz 45 gallons, for example) cooking vessel 12 for suitably containing hot fat 13. Vessel 12 is suitably internally adapted for reciving and supporting mesh trays 14 (five shown) containing pieces of chicken and suitably tandomly stacked on a support rod 15. Vessel 12 is adapted to be closed in a pressure tight condition by **cover** 16 suitably pivotably mounted on vessel 12. **Cover** 16 carries a gasket 17 or the like, which when pressed down against the upper edge of the vessel 12 provides a **seal** capable of withstanding relatively high pressures. The **cover** 16 is securely fixed in place with vessel 12 by a -plurality of lever-type toggle clamps 18, one illustrated, pivotably supported and circumferentially spaced about an upper portion of vessel 12, which clamps 18 engage yoke-like lugs 19 fixed on **cover** 16. Vessel 12 communicates through suitable plumbing with a pair of juxtaposed **storage** **containers** 21 and 23 formed preferably from stainless steel sheet and suitably heat insulated. **Container** 21 is used for storing clean fat preparatory to use thereof in a deep fry cycle, to be illustrated hereinafter. A cloth filter or the like can **cover** the bottom of the interior of **container** 21 for absorbing any fine particulate matter in the fat. An electrical immersion heater 27 suitably connected to a source of electricity is positioned in the **container** 21 for heating the fat therein. Plumbing 28 extends between a lower portion of **container** 21 and a double acting pump 29 driven by a reversible electrical motor 30 suitably connected to a source of electrical power. A solenoid operated valve 26 is disposed in plumbing 28 between **container** 21 and pump 29. Pump 29 communicates through its output side with vessel 12 through plumbing 32 which includes pipes 33 and 34 coupled by two ends of T connection 35. The remainder of plumbing 32 includes a length of pipe 37 suitably connected with vessel 12 at the bottom thereof, -which pipe 37 extends to one end of four-way coupling 38. Pipe 34 is suitably connected by a length of pipe 39 to a solenoid operated valve 40 which in turn is suitably connected to an end of coupling 38 by pipe 41. The valve 40 is arranged to permit flow from the pump 29 to and from vessel 12 as will be described hereinafter. Vessel 12 communicates with **container** 23 through pipe 37, four-way coupling 38, pipe 43 connected with coupling 38, and then through solenoid operated valve 45 connected at one end to a pipe 46 and at the other end to a length of pipe 47 which in turn is suitably connected with one end of a T connector 48 and then through a pipe 50 and 51 to a lower end portion of **container** 23. **Container** 23 receives the fat from vessel 12 after the cooking cycle is completed, as will be fully described hereinafter. The fat will be put into **container** 21 so that it may be reused for another cooking cycle. The fat will, however, be filtered of residual particulate matter before being put into **container** 21. A mesh strainer 53 preferably made of stainless steel is suitably fixed in the **container** 23 through a lower portion thereof. A length of pipe 52 extends from strainer 53 to a solenoid operated value 57 arranged to **open** when filling **container** 21 with the fat from **container** 23. Another length of pipe 59 extends from valve 57 to T connector 35. Solenoid valve 57 is arranged to only permit flow from **container** 23 to **container** 21. A length of pipe 61 extends from T connector 48 to a solenoid operated valve 62 which in turn is suitably connected by pipe 63 to a T connector 64 disposed in plumbing 28. A steam vent line 66 extends outwardly from an upper portion of vessel 12 and extends to a T connection which in turn is connected by a short section of pipe 69 to a solenoid operated valve 68 which in turn is connected by a section of pipe 94 to one end of a four-way coupling 70. A length of pipe 71 is connected to another end of four-way coupling 70, which pipe 71 is **open** to a sewer line, not shown. The solenoid operated valve 68 is set to **open** by means, to be described later, when the pressure in vessel 12 reaches about 15 p.s.i.[i]g. and to close again when the pressure in vessel 12 is relieved from 15 p.s.i.g. to about 10 p.s.i.g. A length of pipe 85 is suitably connected between coupling 70 and solenoid operated valve 87 which in turn is connected to a length of pipe 88 which is connected to one end of four-way coupling 38. A safety relief valve 91 is connected at one end thereof by pipe 92 to T connector 55 and at the other end thereof to a plumbing 93 which is suitably connected to four-way coupling 70. The fat in vessel 12 is heated before the cooking cycle begins and during the cooking cycle while the pressure in the vessel is building up. The heating of the fat in vessel 12 is provided by gas burners 75 suitably connected to a source of gas through plumbing 76. The flow of -gas to the burners 75 is regulated by regulating valve 77 suitably connected with plumbing 76. A pressure gauge 80 for indicating the pressure in vessel 12 is connected by pipe 81 through a pressure switch 82 which in turn is connected to pipe 83 communicating with the interior of vessel 12 through an upper portion thereof. Pressure switch 82 is arranged to relay signals for closing regulating valves 77 when the pressure in vessel 12 reaches about 15 p.s.i.g. and for **opening** valve 77 when the pressure in vessel 12 is decreased to about 10 p.s.i.g. Thus, the burners 75 will be on while the pressure in vessel 12 is building up to 15 p.s.i.g. and off both when the pressure reaches about 15 p.s.i.;g. and during the relieving of the pressure to about 10 p.s.i.g. The burners come on again at 10 p.s.i.g. Pressure switch 82 also is arranged to provide electrical signals to solenoid valve 68 for **opening** and closing same at about 15 p.s.i.g. and about 10 p.s.i.g.

respectively. Thus, steam, some impurities, and fat containing a high incidence of free fatty acids will be relieved from vessel 12 through pipes 66 and 71 when the pressure in vessel 12 builds up to about p.s.i.g. and will continue to be relieved until the pressure in vessel 12 decreases to about 10 p.s.i.g. A thermocouple 90 of any well known type is suitably supported by vessel 12 and is positioned for immersion in the fat 13. Thermocouple 90 is electrically connected with regulating valve 77 through a suitable controller, not shown, for regulating the flow of gas to the burner and to thereby control the temperature of fat 13 in vessel 12. The operation of the apparatus and method of the present invention is preferably performed automatically. The control circuitry shown schematically in Fig. 2 is representative of a circuit which can be used for automatic operation of the present invention. A typical cooking cycle of chicken sections will best illustrate one operation of the cooking system of the present invention. The chicken to be prepared is suitably breaded and placed on the mesh trays 14 which in turn are put on support rod 15. The fat in **container** 21 is heated to a desired temperature by turning on the electric power to heater 27. The fat in **container** 21 is raised to a temperature sufficient to drive off moisture to thereby prevent oxidation of the fat. A suitable temperature would be about 2500 F. If the fat were already at or above 250^0 F. no additional heating would be needed. Assuming then that the temperature of the fat is heated to 250' F. and when this temperature of fat is reached, the main power switch 100 is turned on to connect the control circuitry to the electrical supply buses L_1 and L_2. At this juncture, it should be noted that in this illustrative description **container** 23 contains fat which was used in a completed cooking cycle and was directed into **container** 23 in a manner to be described hereinafter. Pump 29 is activated for pumping fat from **container** 21 to vessel 12 by closing switch 102 which energizes timer 104 thus closing holding switch 105 thereby causing switch 106 to close, to thereby energize motor 30 which then drives pump 29. Timer 104 is a cam type program timer set for the total pumping time necessary to pump the fat from **container** 21 to vessel 12. The amount of fat to be pumped into vessel 12 is determined by the amount necessary for cooking the maximum capacity of chicken in the vessel 12. For example, approximately 175 pounds of fat heated to about 4250 F. would be needed here to cook between 60-80 pounds of chicken sections in about eleven minutes. It should be made clear, however, that this same 175 pounds of fat heated at a temperature below 425' F. can be used to cook lesser amounts of chicken by virtue of the present invention. Returning to the operation of the invention, the contacts of switch 106 remain closed and thereby energize the coils 108 and 110 of valves 26 and 40, respectively. A control relay 117 is also energized which in turn caused contacts 109, 113, 114 and 115 to close to energize pump motor 30 to thereby rotate pump 29 for filling vessel 12 with fat. Afer a preselected period of time, contacts in timer 104 **open** to thus deenergize coils 108 and 117 whose contacts 109 **open** to deenergize coil 110, thus **opening** contacts 113, 114, and 115 to thereby stop pump motor 30 at which time the vessel 12 is filled with the desired amount of fat 13. A short time (viz seconds) after the cam contacts 106 in timer 104 **open**, cam contacts 116 also in cam program timer 104 close to energize selenoid 118 to **open** main valve 77 in gas line 76 for permitting gas flow to burners 75. Main valve 77 is controlled for on-off operation by temperature controller 120 set at cooking temperature, to be elaborated upon later, and is supervised by pressure limit switch 124 and high temperature limit switch 122 suitably connected to thermocouple 90. A flame failure burner protection is provided by a well known type of thermoelectric thermocouple and valve, not shown. A suitably colored light 211 indicates that burners 75 are on. A short time (viz seconds) after the contacts 116 of timer 104 close, cam contacts 125 also in cam program timer 104 close to energize the coils 127 of solenoid valve 57 and control relay 129 whose contacts 1l and 119 close to energize coil 108 of solenoid valve 26 with powering relay 117. Control relay 129 is also energized to close contacts 130, 131, and 132 to reverse the direction of rotation of motor 30 and accordingly, pump 29 to thus pump fat from **container** 23 to **container** 21. During the transfer of fat between **containers** 23 and 21, the fat is filtered of virtually all particulate matter by passing through filter 53. After a predetermined period of time after the closing of the contacts of timer 104 contacts 140 of timer 104 **open** to deenergize coils 127 of valve 57 and relay 129 to deenergize coil 108 of valve 26 by **opening** contacts 111. Control relay 129 is likewise deenergized, **opening** contacts 130, 131, and 132 to thereby stop pump motor 30. The **storage** **container** 21 and vessel 12 now hold fat while **container** 23 is empty. This sequence of filling vessel 12 with heated fat from **container** 21 and filling **container** 21 with filtered fat from **container** 23 is illustrated diagrammatically in FIGS. 3 and 4. Continuing with the operation of the invention, a tern- 1 perature switch 150 closes at a preset temperature setting (cooking temperature) at which time signal light 151, comes on and this indicates that the vessel 12 can now be loaded with chicken. The tray 14 supported chicken is then placed in vessel 12 so that all the chicken is immersed in the fat 13. The **cover** 16 is then clamped shut to thereby **seal** the vessel 12. The time for cooking a food product after vessel 12 is **sealed** is dependent on the amount of food to be prepared-more food requires more time-as well as the nature of the food (viz chicken would be cooked longer than certain sea foods). Similarly, the cooking temperature, mentioned previously, of the fat 13 is also dependent on the nature and amount of food to be prepared. The cooking temperature, set before **sealing** vessel 12, would be about 4250 F. for example, with 60-80 pounds of chicken to be cooked. More or less chicken would require the fat temperature to be accordingly increased or decreased. It is preferable, however, not to raise the temperature of the fat above 500' F. Likewise, the total cooking time will vary with the amount of product, nature of product, and the like. With the vessel 12 **sealed**, the internal pressure will build up due to the generation of steam from the chicken. The temperature of the fat will also decrease. When the internal pressure reaches about 15 p.s.i.g. the contacts of pressure switch 160, forming part of pressure switch 82, close and power control relay 162 which in turn energizes cooking timer 164 through contacts 165. Holding switch 167 is closed to maintain power to cooking timer 164. At this juncture of operation, the actual pressure cooking begins. The pressure switch 160 energizes coil 170 of solenoid valve 68 to thereby **open** valve 68 to release to sewer a certain amount of steam and impurities, including free fatty acids, driven -from the chicken to thereby decrease the internal pressure of vessel 12. At the same time as coil 170 is energized, contacts 172 **open** to deenergize coil 118 of main gas valve 77 to thereby close off the gas supply to burners 75 to cease heating of fat 13. The pressure continues to decrease to about 10 p.s.i.g. at which point pressure switch 160 deenergizes coil 170 to close valve 68. At the same time as coil 170 is deenergized contacts 172 close to energize coil 118 of main gas valve 77 to **open** the gas supply to burners 75 and resume heating of fat 13. This cycle repeats itself throughout the cooking of the chicken. The venting of the steam between 15 p.s.i.g. and 10 p.s.i.g. results in an elimination of some impurities urged out of the chicken during cooking and some free fatty acids formed during cooking. The fat after used for cooking and after being returned to **container** 21, is the same to the naked senses of sight, taste, smell, and touch as it was before a cooking cycle. Furthermore, the venting of steam reduces the amount of water which can remain in the fat 13, thereby reducing the detrimental effect of hydrolyzing the fat to form free fatty acids. It was noted hereinbefore in the introductory portion of this description the damaging effects that water, impurities and free fatty acids can have on the cooking fat. Returning to the operation of this invention, when cooking timer 164 is initially energized it immedately **opens** contacts 180 to thereby deenergize the light 151, as well as **opening** contacts 181 to deenergize relay 162 to **open** contacts 165 to permit timer 164 to cycle out and to **open** contacts 172 to deenergize coil 118 of main gas valve 77 to thereby close the flow of gas burners 75. At the end of the cooking cycle cooking timer 164 times out and contacts 190 close energizing relay 191 **opening** contacts 192 to assure turn off of burners 75. As noted earlier in the description of the operation, the cooking time is dependent on the nature and amount of food to be prepared and on the temperature of the cooking fat. For example, the timer 164 would be set for eleven minutes for between 60 and pounds of chicken to be cooked at 4250 F. initial fat temperature. Less chicken would require a shortened cooking time, as well as a lower cooking temperature. Contacts 190 also energizes time delay relay 193 which energizes coil 194 of solenoid valve 45 through contacts 195. The fat is now discharged from vessel 12 under the urging of the internal steam pressure. As the fat 13 passes from vessel 12 to **container** 23, steam contacts the chicken to drive excessive fat therefrom as well as returning a certain amount of moisture into the chicken. After timer delay relay 193 times out, contacts 197 close to energize coil 199 of solenoid valve 87 to **open** valve 87 and vent the excess steam from vessel 12 to sewer. At the same time contacts 195 **open** to deenergize coil 194 of solenoid valve 45 to thereby close valve 45. Thus, as soon as all of the fat is out of vessel 12 the remaining steam is vented to sewer. The discharge of fat 13 from vessel 12 to **container** 23, and the venting of steam to sewer after discharge of fat, is diagrammatically illustrated in FIGS. and 6. The chicken is now ready to be removed from vessel 12. The **cover** 16 is unlatched, the trays of chicken removed, and the chicken distributed for consumption as desired. Additional features can be incorporated into the control circuitry. As shown, push-button 200 permits removal of fat from the vessel 12 by pump action. Depressing pushbutton 200 energizes coils 202 of solenoid valve 62 and relay 204 which closes contacts 205 powering coil of solenoid valve 40. Valves 62 and 40 are thus **opened**. At the same time relay 204 is energized to close contacts 206, 207 and 208 to start pump motor 30, and accordingly, pump 29. Thus, as illustrated in Fig. 7, the fat 13 is pumped into **container** 23. As well as being useful as an emergency discharge means for the fat in the vessel 12, this pumping can be used for removing fat from vessel 12 when cooking certain foods in an **open** vessel such as potatoes and certain sea foods, for example. A manual selector switch 210 is shown for purposes of providing manual operation of burners 75 by supplying power to energize coil 118 of gas valve 77. The steam in vessel 12 can be manually relieved by actuating switch 220 to supply power to energize coil 170 of solenoid valve 68. Finally, a switch 230 is provided for manual **opening** and closing of solenoid valve 45 to give a pulsing type of fat discharge from vessel 12. Many variations can be incorporated in the control circuitiry for the present invention. Those skilled in the art could readily attest to this. However, it should be clearly understood that the circuitry shown and described herein is only typical and should not be considered as the only circuitry available for the present- invention. SThe cooked chicken emerges with a crisp coating having browned, appetizing appearing color. It is uniformly thoroughly cooked to the bone and is moist and tasty. Furthermore, all the chicken is uniformly cooked between the bottom-most tray 14 to the top-most tray 14. This extraordinarily cooked product is attributable to regulating the heating of the fat 13 between pressure relieving and the steam content in vessel 12 during the cooking of the chicken. This heat and steam regulation was elaborated upon hereinbefore in the

introductory portion of this description. All of the fat is virtually removed from each piece of chicken. Chicken cooked by the present invention can be placed on absorbing paper and removed without leaving a heavy grease spot of the nature which would be left by chicken deep fried by the commonly used deep fry systems. There will be some fat remaining in the chicken prepared by the present invention but the amount of the remaining fat will be very small and just enough to add flavor to the finished chicken.



286) Family number: 877397 (US3460711A)

Title:	**SEALED** RECLOSABLE **CONTAINER** HAVING STACKING FEATURES
Priority:	US19680744946 19680715

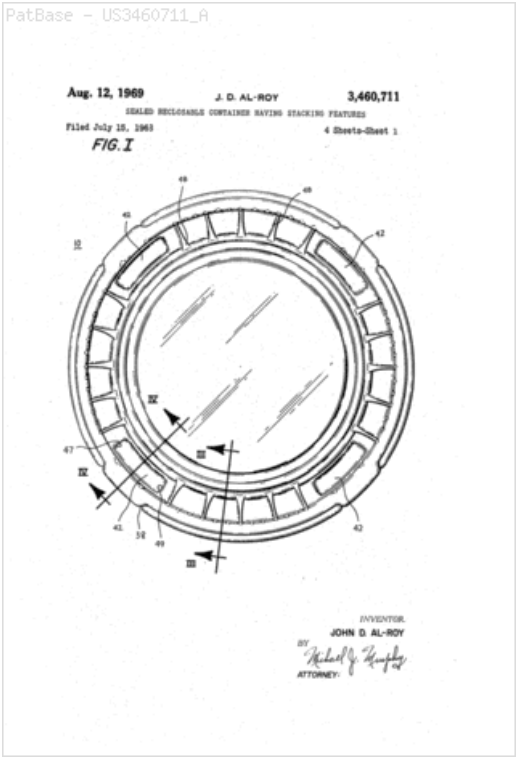
Family:

Publication number	Publication date	Application number	Application date
US3460711 A	19690812	US19680744946	19680715

Probable Assignee:	MONSANTO CO
Assignee(s):(std):	MONSANTO CO
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Inventor(s):	JOHN D AL ROY
International class (IPC 8-9):	B65D21/02 B65D43/02 B65D43/10 (Advanced/Invention); B65D21/02 B65D43/02 B65D43/08 (Core/Invention)
International class (IPC 1-7):	B65D21/00 B65D43/10 B65D85/72
CPC:	B65D21/0233 B65D43/021 B65D2543/00027 B65D2543/00092 B65D2543/00194 B65D2543/00296 B65D2543/00509 B65D2543/00546 B65D2543/0062 B65D2543/00685 B65D2543/00731 B65D2543/00796 B65D2543/00842 B65D2543/00944
European class:	B65D21/02F B65D43/02S3D L65D543/00Y10B2 L65D543/00Y10R L65D543/00Y1A L65D543/00Y1F2C L65D543/00Y1F4C3 L65D543/00Y1M6 L65D543/00Y8D1C L65D543/00Y8D3N L65D543/00Y8S1B2 L65D543/00Y8S1D2 L65D543/00Y8S3B2 L65D543/00Y8S3D2
US class:	206/519 220/60 220/781 220/782 220/793
Classification Explorer	
Cited documents:	US3388827 A, US3362565 A, US3347411 A, US3335901 A, US3137409 A,
Forward Citations:	WO02083516, USD522319, USD514390, USD508819, USD486358, USD444382, USD443205, USD439160, USD433334, USD432914, US8105638, US7922021, US7216769, US6923017, US6789393, US6729472, US6688487, US6349847, US6257401, US5772070, US5607709, US5377860, US5129517, US5031383, US4945710, US4944134, US4770318, US4632272, US4562937, US4146170, US4043482, US4027776, US3773208, US3743133, US3651981, US3643830, US3643812, US3622038, US2015158632, US2008118609, US2006255053, US2006169693, US2006011626, US2005247708, US2005040068, GB2367814, EP0367603, EP0249213,

Abstract:

Source: US3460711A (Claim 1) 1. A **container** comprising: (a) a body having a base, a side wall generally extending upwardly and outwardly from the periphery of the base to an **open** upper end and a rim which extends generally outwardly from the **open** upper end of the body; (b) a resilient lid having an end wall for **covering** the **open** upper end of the body, a side wall extending upwardly from the periphery of the end wall and a flange which extends outwardly from the top of the side wall around the periphery thereof; (c) said body having a first **sealing** means portion in its side wall and said lid having a first **sealing** means portion in its side wall for normally engaging each other to provide a first **seal** of said body when in assembled relation; (d) said body having a second **sealing** means portion in its rim and said lid having a second **sealing** means portion in its flange for normally engaging each g other to provide a second **seal** of said body when in assembled relation; (e) means in said lid outside said second **seal** for removing the lid from the body; (f) said first **sealing** means portion of said body hav- jq ing a stacking means pqrtion formed therein for supporting said body in stacked relationship between the first and second **sealing** means portions of a similarly configured body; and (g) said first **sealing** means portion of said lid having 15 a stacking means portion formed therein for supporting said lid in stacked relationship between the first and second **sealing** means portions of a similarly configured lid.



287) Family number: 999634 (US3654663A)

Title: DEVICE FOR **CLOSURE** OF BOXES, PREFERENTIALLY BOXES FOR ENCLOSURE OF ELECTRICAL EQUIPMENT

Priority: SE19680002593 19680306 SE19680002952 19680306 SE19680002953 19680306

Family:

Publication number	Publication date	Application number	Application date
AT294952 B	19711210	AT19690002209	19690306
AT300078 B	19720710	AT19690002207	19690306
BE729263 A	19690818		19690303
BE729264 A	19690818		19690303
CH487575 A	19700315	CH19690003193	19690303
CH506900 A	19710430	CH19690003192	19690303
DE1910658 A1	19691002	DE19691910658	19690303
DE1910659 A1	19690925	DE19691910659	19690303
DE1910659 B2	19780216	DE19691910659	19690303
DE1910659 C3	19781026	DE19691910659	19690303
DK129548 B	19741021	DK19690001223	19690305
DK129548 C	19750324	DK19690001223	19690305
FI51877 B	19761231	FI19690000680	19690306
FI51877 C	19770412	FI19690000680	19690306
FR2003337 A1	19691107	FR19690006181	19690306
FR2003338 A1	19691107	FR19690006182	19690306
GB1223814 A	19710303	GB19690010835	19690228
GB1246538 A	19710915	GB19690010836	19690228
NL149040 B	19760315	NL19690003488	19690306
NL6903488 A	19690909	NL19690003488	19690306
NL6903489 A	19690909	NL19690003489	19690306
NO126825 B	19730326	NO19690000904	19690304
SE348090 B	19720821	SE19680002952	19680306
SE371735 B	19741125	SE19680002953	19680306
SE371735 C	19750306	SE19680002953	19680306
US3564112 A	19710216	US19690804228	19690304
US3654663 A	19720411	US19690804229	19690304

Probable Assignee: ELEKTROVERKEN I GAEVLE AB

Assignee(s):(std)**:** ELEKTROVERKEN AB GAEVLE I ; ELEKTROVERKEN GAEVLE I AB ; ELEKTROVERKEN I GAEVLE AB ; ELEKTROVERKEN I GAEVLE SW AB ; K PELZ ; ELEKTROVERKEN I GAVLE AB ; ELEKTROVERKEN I GALVE AB

Assignee(s): ELEKTROVERKEN I GAVLE ; ELEKTROVERKEN I GEVLE AB ; AB ELEKTROVERKEN I GAEVLE ; AB ELEKTROVERKEN I GAEVLE GAEVLE SCHWEDEN ; AB ELEKTROVERKEN I GAEVLE GAEVLE ZWEDEN ; AB ELEKTROVERKEN I GAEVLE SW ; AB ELEKTROVERKEN I GALVE ; AB ELEKTROVERKEN I GAVLE

Inventor(s):(std)**:** ALGOTSSON SEVEN ERKI ; ALGOTSSON SVEN ERIK ; ERIK ALGOTSSON SVEN ; HUGO IVAN LORENTZON SUNE ; LORENTZON S ; LORENTZON SUNE HUGO IVAN ; LORENTZON S H I ; IVAN LORENTZON SUNE HUGO ; ALGOTSSON S E ; SVEN ERIK ALGOTSSON ; ALGOTSSON S

Inventor(s): ALGOTSSON S SW ; SUNE HUGO IVAN LORENTZON GAEVLE SW ; SUNE HUGO IVAN LORENTZON ; SEVEN ERKI ALGOTSSON ; SUNE HUGO IVAN LORENTZON GAEVLE

International class (IPC 8-9): B65D6/24 H01H9/04 H02B1/38 H02B1/40 H05K9/00 (Advanced/Invention);
E05D7/10 H02B1/01 (Advanced/Non-invention);
B65D6/16 H01H9/04 H02B1/00 H05K9/00 (Core/Invention);
E05D7/00 (Core/Non-invention)

International class (IPC 1-7): B65D6/24 E05C1/00 E05D15/50 H01H9/04 H02B1/00 H02B1/02 H02B1/08 H02B1/12 H02G3/08 H05K5/00 H05K5/06

CPC: E05D7/10 H02B1/012 H02B1/40 Y10T16/5275 H01H9/04 E05D7/1011 E05D7/1016 E05Y2900/208 H02B1/38

European class: H01H9/04 H02B1/38 H02B1/40 H05K9/00B P05D7/10B1 P05D7/10B3 P05Y900/208 T02B1/01D

US class: 16/147 16/230 174/52 174/52.1 174/535 174/563 220/3.8 220/3.92 361/641 D25/48 D25/48.3

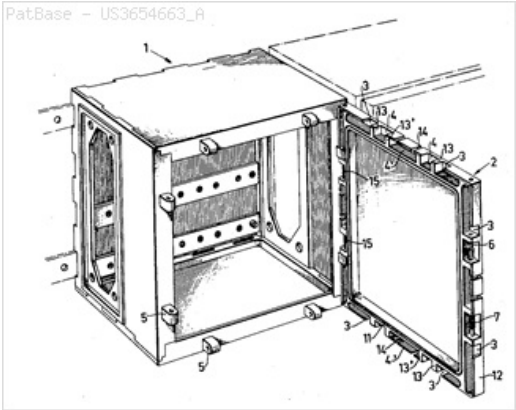
Classification Explorer

Cited documents: US88355310, US3488795 A, US3410441 A, US3405835 A, US3327882 A, US3315834 A, US3311945 A, US3234908 A, US3093259 A, US2919045 A, US2791681 A, US2778053 A, US2662242 A, US2660752 A, US2114170 A, US1817307 A, US1654225 A, US1630524 A, US1541485 A, US1205589 A,

Forward Citations: WO9627228, WO9627228, WO9511537, USRE45430, US8966821, US8910377, US8904736, US8853535, US8802983, US8789261, US8779288, US8714667, US8702184, US8678856, US8633385, US8576548, US8573715, US8558111, US8457464, US8450609, US8388371, US8314335, US8283562, US8276325, US8115098, US8105107, US8028408, US7977572, US7968794, US7880086, US7850031, US7795532, US7763799, US7763798, US7762838, US7718893, US7619162, US7518863, US7449634, US7439444, US7427713, US7425678, US7410372, US7381890, US7368662, US7348486, US7345238, US7325691, US7323639, US7282643, US7176379, US7119277, US7071415, US6987225, US6960721, US6903272, US6872887, US6806426, US6770816, US6770814, US6723922, US6394007, US6308396, US6229087, US6163431, US6107567, US5940937, US5932843, US5926916, US5747734, US5651164, US5392958, US5281997, US5251103, US5243386, US5231247, US5181166, US4921148, US4908733, US4890318, US4856671, US4776477, US4754369, US4699289, US4532673, US3913997, US3860139, US3797871, US2014375196, US2010327713, US2010218969, US2010218374, US2010084154, US2009323265, US2009134755, US2009085449, US2009021895, US2009020306, US2008296039, US2008238270, US2008235943, US2008235907, US2008223601, US2008190640, US2008174217, US2008099275, US2008053698, US2008041854, US2007210686, US2007210681, US2006076348, US2006070904, US2006005984, US2005197019, US2005161244, US2005118841, US2005092509, US2004238198, US2004177990, US2004094323, US2003183408, ITTO20080567, GB2400409, GB2324993, GB2316706, GB2304062, GB2157086, FR2825406, FR2808174, FR2766021, FR2580890, ES2531121, EP3014715, EP1149545, EP0891027, EP0680123, EP0579291, EP0579291, EP0533555, EP0467264, EP0438013, DE9408831, DE4336188, DE4330005, DE4021773, DE3812370, DE3603643, DE3527654, DE3511901, DE29502371, DE20116631, DE19913657, DE19737178, DE19506744, DE102006020504, DE102006020504, DE10104215,

Abstract:
Source: US3654663A A **box** **cover** is provided in all its side edges with cut-outs, some of which correspond to lugs on the front

of the **box** remote from its bottom in which lugs can be inserted pins sliding across the cut-outs corresponding to the lugs, so forming hinges and/or locking devices.



288) Family number: 880162 (US3464832A)

Title:	FOOD **PACKAGING**
Priority:	US19650509129 19651122

Family:

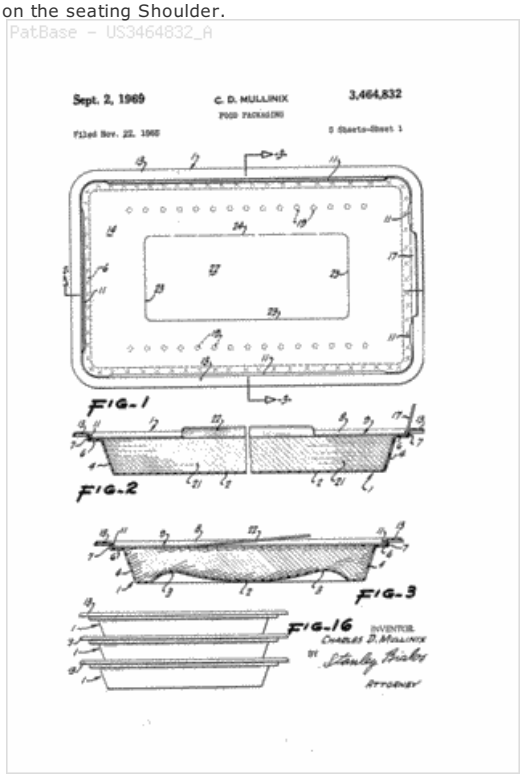
Publication number	Publication date	Application number	Application date
US3464832 A	19690902	US19650509129	19651122

Probable Assignee:	CHARLES D MULLINIX
Assignee(s):(std):	CHARLES D MULLINIX
Inventor(s):(std):	MULLINIX CHARLES D
Inventor(s):	CHARLES D MULLINIX
International class (IPC 8-9):	B65D51/20 B65D77/20 (Advanced/Invention); B65D51/18 B65D77/10 (Core/Invention)
International class (IPC 1-7):	B65B25/06 B65D81/20
CPC:	Y10S206/819 B65D77/2032 B65D51/20 B65D77/2016 B65D2251/0018 B65D2251/0093
European class:	B65D51/20 B65D77/20B3 B65D77/20E1B L65D251/00Y2F L65D251/00Y6M
US class:	206/503 206/557 206/819 229/123.1 229/125.05 229/204 99/171

Classification Explorer

Cited documents:	US3317068 A, US3301464 A, US3154225 A, US2241710 A,
Forward Citations:	WO15015034, USD508819, USD444382, USD443205, USD439160, USD433334, USD432914, US8746490, US8105638, US7757705, US6412638, US6349847, US6257401, US5292001, US5018624, US4964507, US4883195, US4849606, US4803048, US4570806, US4469258, US4427148, US4373636, US4285461, US4183458, US4055672, US3981434, US3918608, US3885731, US3829003, US3813731, US3734276, US3707274, US3667667, US2017112284, US2015001230, US2008118609, US2007272302, US2007020362, US2007012703, ITMI20101463, ITBS20110059, EP1923320, EP0093441,

Abstract:
Source: US3464832A ABSTRACT OF THE DISCLOSURE
A food **package** comprises a tray part having a fiat peripheral Shoulder, and a **cover** structure snap locked to the tray and which is composed of a fiat light-trans-mitting membrane weakly adhered to an opaque fiat **cover** panel to enable the panel to be peeled from the membrane. The membrane is heat **sealed** to the Shoulder; and the **cover** panel has a pulì **tab** projecting from one edge. A score line hinge connection is provided along its opposite edge. In assembling the **package**, the tray is supported on a ring, the **cover** panel and membrane are snap locked to the tray while thus supported, and bonding of the membrane to the seating Shoulder is effected while the tray is supported on the seating Shoulder.



289) Family number: 331200 (US3469367A)

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Title: **BAG** FEEDING AND FILLING APPARATUS

Priority: US19660553990 19660531

Family:

Publication number	Publication date	Application number	Application date
DE1561978 A1	19700423	DE1967B092673	19670523
DE1561978 B2	19780831	DE1967B092673	19670523
DE1561978 C3	19790503	DE1967B092673	19670523
GB1188384 A	19700415	GB19670022816	19670517
SE336549 B	19710705	SE19670007590	19670530
US3469367 A	19690930	US19660553990	19660531

Probable Assignee: BEMIS CO INC

Assignee(s):(std)**:** BEMIS CO INC

Assignee(s): BEMIS CO INC MINNEAPOLIS MINN V ST A ; BEMIS COMPANY INC ; BEMIS COINC

Inventor(s):(std)**:** AYRES R ; AYRES RICHARD H ; LIEDER GAYLERD M ; H AYRES RICHARD ; LIEDER G ; M LIEDER GAYLERD

Inventor(s): RICHARD H AYRES ; GAYLERD M LIEDER

International class (IPC 8-9): B65B1/02 (Advanced/Invention); B65B1/00 (Core/Invention)

International class (IPC 1-7): B65B1/02 B65B39/02 B65B43/00 B65B43/04 B65B43/26

CPC: B65B1/02

European class: B65B1/02

US class: 53/167 53/567

Classification Explorer

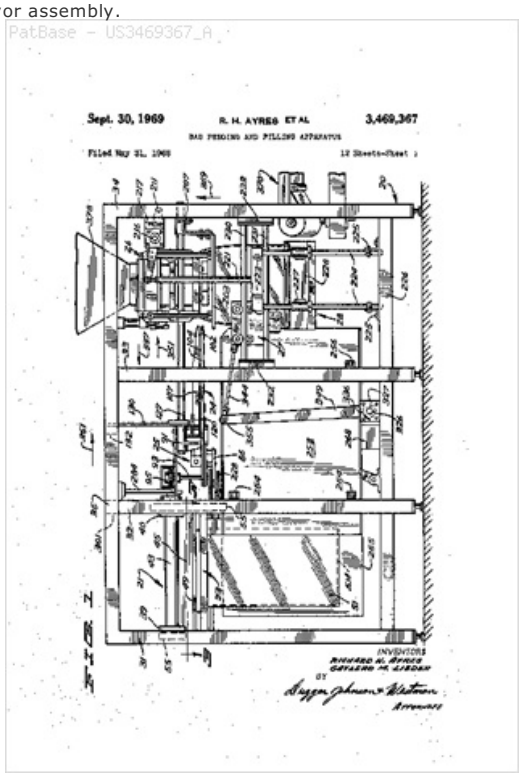
Cited documents: US3359648 A, US3264794 A, US2853842 A,

Forward Citations: US5452567, US4561238, US3805489, JP51006366,

Abstract:

Source: US3469367A ABSTRACT OF THE DISCLOSURE

Apparatus having means to feed a continuous tubular web adjacent a knife that severs a tubular member froni the web while the web is partially supported from a first conveyor, a second endless conveyor that receives and moves the tubular member past a second knife to spread its upper marginal edge portions and thence transfers the partially **opened** tubular member to a horizontally reciprocai hopper assembly that includes gripper means to sup-portingly hold the tubular member and a spout vertically 20 movable to **open** the tubular member, and saddle and pusher means to receivingly support the filled tubular member released by the hopper assembly and move it to another conveyor assembly.



290) Family number: 6060649 (US3719087A)

Title: PIPETTING APPARATUS AND METHOD

Priority:
AT19710005545 19710625 AU19710029657 19710603 DE19712132066 19710628
FR19710024054 19710701 GB19710029675 19710624 US19660541306 19660408
US19700057720 19700723 US19690860775 19690924

Family:

Publication number	Publication date	Application number	Application date
AT313857 B	19740311	AT19710005545	19710625
AU197129657 A1	19721207	AU19710029657	19710603
AU207129657 A1	19721207	AU19710029657	19710603
AU451101 B2	19740705	AU19710029657	19710603
BE737034 A	19700204		19690804
BE769366 A	19720103	BE19710769366	19710701
DE2132066 A1	19730118	DE19712132066	19710628
FR2144117 A5	19730209	FR19710024054	19710701
GB1358594 A	19740703	GB19710029675	19710624
NL7109101 A	19730103	NL19710009101	19710701
US3475128 A	19691028		19660408
US3607082 A	19710921		19690924
US3719087 A	19730306		19700723

Probable Assignee: BIO SCIENCE LABOR

Assignee(s):(std)**:** BIO SCIENCE LAB VAN NUYS ; BIO SCIENCE LABOR ; THIERS R

Assignee(s): THIERS R US ; BIOSCIENCE LABORATORIES ; BIO SCIENCE LABORATORIES VAN NUYS COUNTY OF LOS ANGELES CALIFORNIA EUA ; BIO SCIENCE LABORATORIES ; BIO SCIENCE LABORATORIES VAN NUYS ; BIO SCIENCE LABORATORIES VAN NUYS COUNTY OF LOS AN ; BIO SCIENCE LABORATORIES VAN NUYS COUNTY OF LOS ANGELES CALIFORNIA E U A ; BIO SCIENCE LAB

Inventor(s):(std)**:** THIERS R E ; THIERS R ; THIERS RALPH EDWARD ; THIERS RALPH E ; RALPH EDWARD THIERS

Inventor(s): RALPH E THIERS ; EDWARD THIERS RALPH ; THIERS R US ; R E THIERS ; RE THIERS

International class (IPC 8-9): B01L3/00 B01L3/02 F04B43/14 F04F1/02 G01N1/18 G01N1/38 G01N35/08 G01N35/10 (Advanced/Invention); G01N35/10 (Advanced/Non-invention); B01L3/00 B01L3/02 F04B43/12 F04F1/00 G01N1/18 G01N1/38 G01N35/08 (Core/Invention); G01N35/10 (Core/Non-invention)

International class (IPC 1-7): B01L3/00 B01L3/02 B01L9/00 F04F1/02 G01N1/00 G01N1/14 G01N31/00 G01N31/16 G01N35/00 G01N35/08

CPC: B01L3/0213 Y10T436/118339 B01L3/502 B01L3/021 B01L2400/0481 F04B43/14 F04F1/02 G01N1/18 G01N1/38 G01N35/08 G01N2035/1025 Y10T436/119163

European class: B01L3/00C6 B01L3/02C B01L3/02C1 B01L3/502 F04B43/14 F04F1/02 G01N1/18 G01N1/38 G01N35/08 L01L400/04M4 S01N35/10C5

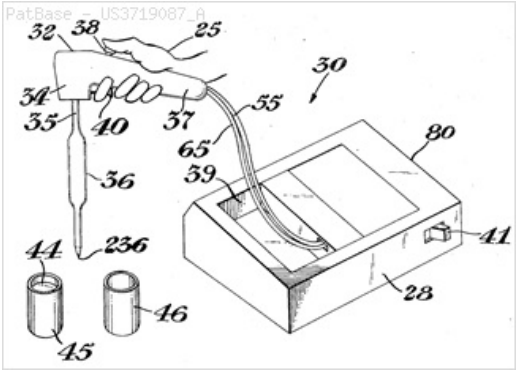
US class: 141/18 141/26 204/409 210/644 222/450 23/230 232/300 251/7 251/9 356/246 356/36 366/189 417/475 417/477.12 417/477.3 417/477.5 417/477.9 418/45 422/103 422/400 422/535 422/66 422/922 435/30 435/309.1 436/53 436/54 73/425.6 73/864.14 73/864.15

Classification Explorer

Cited documents: US3484207 A, US3475128 A, US3346024 A, US3310002 A, US3197285 A, US3141336 A, US2989076 A, US2987004 A, US2920578 A, US2901327 A, US2865303 A, US2767064 A,

Forward Citations: WO05087377, WO04106916, WO0200346, WO0200346, WO0074851, USD620602, US8758687, US8322199, US8114362, US7416704, US7396512, US7381371, US6758106, US6734026, US5456880, US5090255, US5007296, US4847208, US4715710, US4715435, US4691580, US4597298, US4585623, US4487081, US4428745, US4425113, US4369665, US4058363, US3994687, US3991616, US3869068, US3858796, US3834240, US3609040, US3607082, US2017264223, US2015298089, US2013202487, US2009010809, US2009007701, US2008008623, US2006226383, US2006104866, US2005184516, US2005158211, US2005095723, US2004241022, US2004004717, US2002012613, US2001043886, JP2004512925, FR2454547, EP1555067, EP1479906, EP1059120, EP0904840, EP0456137, EP0456137, DE4014588, DE10322797, DE10322797,

Abstract:
Source: US3719087A An automatic pipetting apparatus comprises a hand-holdable pipet-operating apparatus which includes means for releasably coupling a plurality of interchangeable pipets to a low-dead-space valving structure. The valving structure operates the pipets by selectively **sealing** or applying suction or pressure to a pipet. A pipet driving subassembly including pressure and suction pumps is coupled to the pipetting apparatus by flexible tubes, permitting continuous application of suction and pressure to the pipet-operating apparatus as well as free movement of the pipet-operating apparatus with respect to the pipet driving subassembly.



291) Family number: 94270 (US3474951A)

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Title: CONTAINER CLOSURE

Priority: US19680746119 19680719

Family:

Publication number	Publication date	Application number	Application date
BE736295 A	19691231		19690718
DE1936753 A1	19700326	DE19691936753	19690718
FR2013287 A1	19700327	FR19690024576	19690718
GB1281177 A	19720712	GB19690036348	19690718
NL6911115 A	19700121	NL19690011115	19690718
US3474951 A	19691028	US19680746119	19680719

Probable Assignee: EX CELL O CORP

Assignee(s):(std)**:** EX CELL O CORP

Assignee(s): EXCELLO CORP ; ELOTRADE A SWISS CORP AG ; ELOTRADE AG ; EX CELL O A CORP OF DE CORP

Inventor(s):(std)**:** BENJAMIN EGLESTON HARRY ; JOSEPH FELIKS JAMES ; FELIKS JAMES J ; EGLESTON HARRY B

Inventor(s): HARRY B EGLESTON ; JAMES J FELIKS

International class (IPC 8-9): B65D5/06 (Advanced/Invention); B65D5/02 (Core/Invention)

International class (IPC 1-7): B65D11/00 B65D5/06 B65D5/08 B65D5/10 B65D5/26 B65D5/74 B65D53/00

CPC: Y10S229/941 B65D5/061

European class: B65D5/06B

US class: 229/184 229/37 229/5.84 229/941

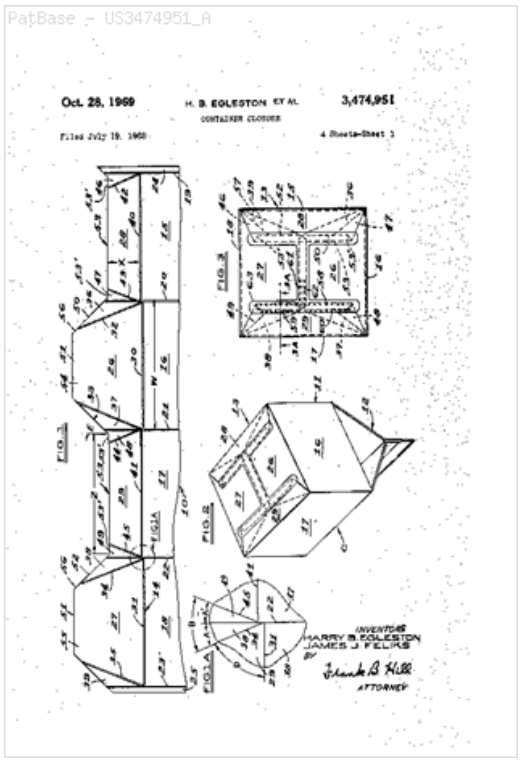
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Cited documents: US3029997 A, US2596225 A, US2358124 A,

Forward Citations: US5921465, US5916080, US5711475, US5474232, US4655386, US4332345, US4192446, US3913826, US3913825, US2004102300, EP0074340, DK153455,

Abstract:

Source: US3474951A ABSTRACT OF THE DISCLOSURE
This invention relates to a liquid-tight container bottom closure formed from a thermoplastic sheet material that can be folded and heat-sealed by automatic equipment to provide for weld-sealed joints which require only enough heat to secure two layers of thermoplastic material together. This application is a continuation-in-part application of Ser. No. 535,241, filed Mar. 17, 1966, now United States Letters Patent No. 3,406,892.



292) Family number: 1027446 (US3699746A)

Title: APPARATUS FOR FILLING A CHAIN OF CONNECTED **BAG** ELEMENTS

Priority: US19680727464 19680508 US19680727545 19680508 US19710132808 19710409 US19710150276 19710607

Family:

Publication number	Publication date	Application number	Application date
BE732665 A	19691107		19690507
DE1923020 A1	19691120	DE19691923020	19690506
FR2009866 A1	19700213	FR19690014572	19690507
GB1265572 A	19720301		19690507
NL166656 B	19810415	NL19690006062	19690418
NL166656 C	19810915	NL19690006062	19690418
NL6906062 A	19691111	NL19690006062	19690418
NL8006727 A	19810331	NL19800006727	19801211
US3559874 A	19710202	US19680727464	19680508
US3699746 A	19721024	US19710132808	19710409
US3744211 A	19730710	US19710150276	19710607

Probable Assignee: PLASTIC FILMS INC A CORP OF OH

Assignee(s):(std)**:** BASIC PACKAGING SYSTEMS INC ; DOW CHEMICAL CO

Assignee(s): PLASTIC FILMS INC ; DOW CHEMICAL CO THE ; THE DOW CHEMICAL COMPANY ; PLASTIC FILMS INC A CORP OF OH ; BASIC OHIO ACQUISITION 30400 DETROIT RD STE 203 WESTLAKE OH 44145 A CORP OF OH CORP ; BASIC OHIO ACQUISITION CORP ; BASIC PACKAGING SYSTEMS INC AVON LAKE OHIO VER ST V AM ; BASIC PACKAGING SYSTEMS INC TE AVON LAKE OHIO ; BASIC PACKAGING SYSTEMS INC TE AVON LAKE OHIO VER ; BASIC PACKAGING SYSTEMS INC TE AVON LAKE OHIO VER ST V AM ; BASIC PACKAGING SYSTEMS INC TE AVON LAKE OHIO VERSTVAM ; DOW CHEM CO US ; DOW CHEMICAL

Inventor(s):(std)**:** ARMSTRONG WILLIAM ANDREW ; TITCHENAL OLIVER RAY ; RAY TITCHENAL OLIVER ; ANDREW ARMSTRONG WILLIAM ; TITCHENAL OLIVER R ; ARMSTRONG WILLIAM A ; TITCHENAL O ; ARMSTRONG W

Inventor(s): OLIVER RAY TITCHENAL ; OLIVER R TITCHENAL ; OHIO ; ARMSTRONG W US ; VER ST V AM ; WILLIAM ANDREW ARMSTRONG BEIDEN TE BEREA ; WILLIAM A ARMSTRONG ; TITCHENAL O US ; ST V AM VER

International class (IPC 8-9): B65B43/12 B65B43/26 B65B61/04 B65B9/08 B65B9/087 B65B9/093 B65D75/42 (Advanced/Invention); B65B43/00 B65B43/26 B65B61/04 B65B9/06 B65D75/00 (Core/Invention)

International class (IPC 1-7): B65B1/00 B65B43/12 B65B43/26 B65B61/04 B65B9/08 B65D27/10 B65D33/00 B65D75/42

CPC: B65B9/093 B65D75/42 B65B43/123 B65B43/267 B65B61/04 B65B9/087

European class: B65B43/12B B65B43/26D B65B61/04 B65B9/08 B65B9/087 B65B9/093 B65D75/42

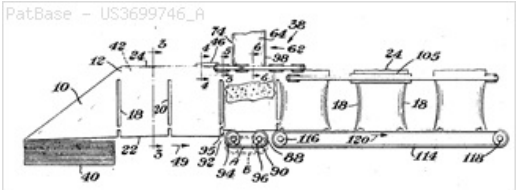
US class: 229/69 383/37 383/65 53/284.7 53/29 53/384.1 53/459 53/570

Classification Explorer

Cited documents: US3583127 A, US3492783 A, US3359703 A, US3289510 A, US3286433 A, US2272251 A, US1628215 A, DE1178202 B,

Forward Citations: WO9419250, WO9114622, WO9107320, WO8601485, WO8200129, WO11060784, WO10051370, WO02083506, USRE40284, USRE39505, USD787949, USD646972, USD630945, US9844911, US9809369, US9808989, US9598216, US9550339, US9510713, US9476630, US9469442, US9463914, US9283729, US9266300, US9205622, US8906478, US8876099, US8627637, US8425994, US8357439, US8354150, US8038348, US8021049, US7897220, US7897219, US7862870, US7767288, US7757459, US7718028, US7374075, US7347911, US7163706, US7048441, US6932134, US6789376, US6651406, US6591586, US6499598, US6279298, US6228012, US6148588, US6055796, US5996319, US5987856, US5944424, US5887412, US5806276, US5743070, US5722218, US5327704, US5238306, US5187917, US5179816, US5004395, US4969310, US4946339, US4945714, US4863285, US4850178, US4848064, US4810109, US4798041, US4756144, US4744196, US4717374, US4716706, US4709398, US4671044, US4665552, US4662147, US4654878, US4648233, US4637060, US4630311, US4598421, US4586319, US4584706, US4581874, US4569083, US4524459, US4522017, US4517788, US4514962, US4510737, US4490959, US4470152, US4464790, US4444854, US4416376, US4260116, US4169345, US4120134, US4021283, US3996721, US3941306, US3938299, US3924522, US3859062, US3824908, US3815317, US3779449, US2016051097, US2016023788, US2014353192, US2013042967, US2011165352, US2011151159, US2011097521, US2010254633, US2010221466, US2010109224, US2010054635, US2009293427, US2009186175, US2009110864, US2007054074, US2007002595, US2006266461, US2006262997, US2006086064, US2005266189, US2005230450, US2005224160, US2005204700, US2005199730, US2005132670, US2005121099, US2004154728, US2004131731, US2003180486, US2003154697, US2003027701, JP57501076, GB2204560, ES2331391, EP1008523, EP1002719, EP0965520, EP0957044, EP0825117, EP0825116, EP0825115, EP0553886, EP0485782, EP0449365, EP0299346, EP0266438, EP0176851, EP0163755, DE2620507, AU568604, AU568091,

Abstract:
Source: US3699746A Apparatus for filling a chain of connected **bag** elements wherein improved design enables the apparatus to receive the **bag** elements from a folded pile. This allows the use of **bag** elements almost totally separated from each other whereby after filling the **bag** elements can be easily parted, as, for example, by a gentle pulling action. Accordingly, a cutting station to part the **bags** after filling can be eliminated from the apparatus. Other beneficial features of the invention include the employment of a mandrel to initially mount and align the connected **bag** elements in the apparatus such that the possibility of fouling the same by misfeeding the **bags** thereto is minimized, and an intermittently operated filling station which works in combination with a continuously run **sealer** or closing station to facilitate the pulling apart of the connected **bag** elements after fill operations.



293) Family number: 30920278 (US3606136A)

Title: **CONTAINERS** MADE FROM A FOAM PLASTIC MATERIAL

Priority: SE19680008710 19680627

Family:

Publication number	Publication date	Application number	Application date
AU206956841 A1	19701224	AU19690056841	19690623
BE735065 A	19691201		19690624
CH509205 A	19710630	CH19690009716	19690625
DE1932008 A1	19700102	DE19691932008	19690624
DK121499 B	19711018	DK19690003464	19690626
ES172836 U	19720401	ES19690172836U	19690624
ES172836 Y	19730116	ES19690172836U	19690624
FR2011728 A1	19700306	FR19690021062	19690624
GB1253913 A	19711117	GB19690030081	19690613
NL6909742 A	19691230	NL19690009742	19690625
SE317622 B	19691117	SE19680008710	19680627
US3606136 A	19710920		19690613

Probable Assignee: TETRA PAK AB

Assignee(s):(std)**:** TETRA PAK AB ; TETRA PAK INT ; TETRA PAK INT AKTIEBOLAG ; TETRA PAK INTERNAT AKTIEBOLAG ; AB TETRA PAK

Assignee(s): AKTIEBOLAGET TETRA PAK ; TETRA PAK INTERNATIONAL AKTIEBOLAG

Inventor(s):(std)**:** CHRISTIAN HEGARDT ; HEGARDT C ; HEGARDT CHRISTIAN

Inventor(s): CHRISTIAN REGARDT

International class (IPC 8-9): B29C65/48 B65B7/28 B65D77/20 B65D77/36 (Advanced/Invention); B29C65/48 B65B7/28 B65D77/10 (Core/Invention)

International class (IPC 1-7): B29C24/00 B29D27/00 B65B7/28 B65D11/02 B65D17/16 B65D41/00 B65D41/02 B65D41/14 B65D41/44 B65D43/08 B67B

CPC: B29C66/542 B65D77/2024 B29C65/48 B65B7/2878 B29C66/727 B29C66/71 B29C66/112 B29C66/116

European class: B29C65/48 B65B7/28F4 B65D77/20E

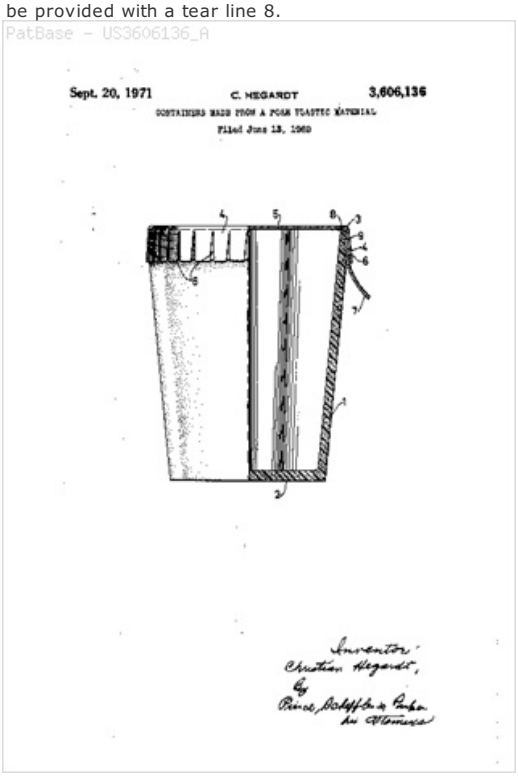
US class: 215/253 215/326 215/46 220/200 220/359.2 220/359.4 229/123.1 229/160.2 229/404 229/43 229/5.5

Classification Explorer

Forward Citations: WO9503972, US5951451, US5322214, US5191980, US5029752, US4505423, US4136203, US3976795, US3753512, US2007131639, JP4757793, JP4757793, JP2005085077, EP1721831, EP1721831, DE9000012, DE3337684, AU673255,

Abstract:

Source: US3606136A 1,253,913. **Packaging**. TETRA PAK A.B. 13 June, 1969 [27 June, 1968], No. 30081/69. Heading B8C. In a **container** made from a foam plastics material comprising a body 1, a bottom 2 and a **cover** 5 of metal foil **covering** the **opening** 3, the edge portion 4 of the **cover** 5 is folded down whilst being pleated so as to bear against the outside of the body and the **cover** and the body are **united** to form a leakproof joint by the plastics material being caused to swell to fill the pleats 6 along the edge portion 4. As shown, the inner surface of the **cover** 5 is coated with a heat **sealable** varnish and the edge portion is provided with a pull **tab** 7 for removal of the **cover**, which may be provided with a tear line 8.



294) Family number: 723815 (US3478743A)

Title:	CLOSED URINARY DRAINAGE SYSTEM
Priority:	US19670669183 19670920

Family:

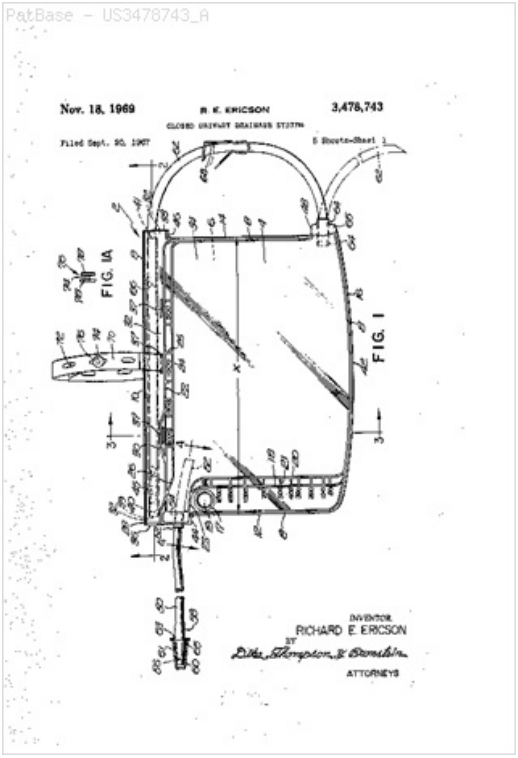
Publication number	Publication date	Application number	Application date
GB1222250 A	19710210	GB19680034630	19680719
US3478743 A	19691118	US19670669183	19670920

Probable Assignee:	ELLIOT LAB INC
Assignee(s):(std):	ELLIOT LAB INC
Assignee(s):	ELLIOT LABORATORIES INC
Inventor(s):(std):	ERICSON RICHARD E
Inventor(s):	RICHARD E ERICSON
International class (IPC 8-9):	A61F5/44 A61F5/441 A61M1/00 A61M23/00 (Advanced/Invention); A61F5/44 A61F5/441 A61M1/00 A61M23/00 (Core/Invention)
International class (IPC 1-7):	A61F5/44 A61M1/00 A61M25/00 A61M3/00
CPC:	A61F5/4404 A61F5/441 A61M1/0019
European class:	A61F5/441 A61F5/44E A61M1/00B
US class:	128/275 285/12 604/325 604/326 604/33 604/37
Classification Explorer	
Cited documents:	US3370589 A, US3316910 A, US3312221 A, US3186410 A, US2863453 A,
Forward Citations:	WO8800816, US9861781, US9855163, US9463110, US9456920, US9149385, US8926577, US8852171, US8777912, US8597266, US7001370, US6887230, US6605076, US6569125, US6516562, US6447498, US6261266, US6217568, US6213996, US6193697, US5871500, US5797897, US5776125, US5658260, US5449357, US5211638, US5188620, US5167646, US4439188, US4346703, US4228801, US4211224, US4197848, US4192295, US4064882, US4044793, US3994293, US3865165, US3802418, US3731684, US3707972, US3683894, US3624755, US2015133898, US2010280489, US2010222754, US2009227971, US2008119803, US2005159713, US2005015070, FR2501499, FR2448675, FR2413913, CN102247626,

Abstract:

Source: US3478743A ABSTRACT OF THE DISCLOSURE

A closed urinary drainage system comprising a disposale, plastic **bag** made up of a pair of liat, flexible, plastic sheet panels in back-to-back relation **sealed** along their peripheries, one panel being opaque, preferably white, and the other transparent or translucent. The **bag** is divided by a horizontal **seal** line into a lower drainage fluid Chamber and an upper elongated pocket, which ex-tends along the width of the top of the **bag** and which snugly receives a relatively rigid, hollow, stabilizing tube **open** at both ends. A flexible urinary drainage tube, for draining fluid into the upper part of the fluid Chamber, and a flexible draw-off tube, for drawing off fluid from the lower part of the fluid Chamber, are hermetically **sealed** to the upper and lower portions of the **bag** respectively. The draw-off tube loops laterally outwardly and up-wardly and then laterally inwardly from the lower portion of the **bag** with its end being snugly but removably re-ceived in an **open** end of the stabilizing tube, the other end of such stabilizing tube being **open** to the atmosphère. A filter is located in the stabilizer tube spaced from the end of the draw-off tube. The fluid Chamber is closed to the atmosphère except through the stabilizer tube, filter and draw-off tube. The filter within the stabilizing tube closes this route to micro-organisms. Accordingly, the system is a closed one. The **bag** may be suspended by means of a highly flexible, plastic hanging strap received in a slit in the **bag** immediately under the stabilizing tube, and the lower edge of the **bag** is bowed downwardly, with the lowermost portion being located opposite the slit for balance. The stabilizing tube stabilizes the **bag** against wrinkle and sag, provides a protective and convenient receptacle for the end of the draw-off tube to reduce danger of contamination thereof and functions with the draw-off tube as a filtered inlet for sterilizing gases and as an overflow. The drainage tube may be provided with a branched fitting for connection with an irrigating tube connected to a source of irrigating fluid for closed system altemating irrigation and drainage. The branch of the fitting for connection for irrigation, may be provided with a valve member biased to close **seal** position and adapted to be forced out of close position by insertion of the tip of an irrigating syringe or a rigid tubulaer adapter attached to the irrigation tube. BRIEF SUMMARY OF THE INVENTION



295) Family number: 936038 (US3479487A)

Title: TEMPERATURE CONTROLLER EMPLOYING CLOSED LOOP FEEDBACK AND INCREMENTAL PROGRAMMING

Priority: US19660558142 19660616 US19670642627 19670504 US19700088276 19701110 US19680712578 19680215 US19670656622 19670711

Family:

Publication number	Publication date	Application number	Application date
DE2123378 A1	19720518	DE19712123378	19710511
DE2123378 C2	19821216	DE19712123378	19710511
JP56022141 B4	19810523	JP19710038164	19710601
US3479487 A	19691118	US19670642627	19670504
US3490886 A	19700120	US19660558142	19660616
US3551127 A	19701229	US19670656622	19670711
US3551645 A	19701229	US19680712578	19680215
US3711939 A	19730123	US19700088276	19701110

Probable Assignee: STOLL MILTON WESTBURY NY

Assignee(s):(std)**:** STOLL M ; STOLL MILTON

Assignee(s): STOLL MILTON WESTBURY N Y US ; STOLL MILTON WESTBURY NY ; STOLL M US ; MILTON STOLL

Inventor(s):(std)**:** STOLL MILTON ; STOLL M

Inventor(s): STOLL M US ; MILTON STOLL ; STOLL MILTON WESTBURY N Y ; STOLL MILTON WESTBURY N Y US ; STOLL MILTON WESTBURY NY

International class (IPC 8-9): B65B31/02 C03B23/20 G05B19/07 G05D23/22 H01J9/32 H05B3/00 (Advanced/Invention); B65B31/02 C03B23/00 G05B19/04 G05D23/20 H01J9/32 H05B3/00 (Core/Invention)

International class (IPC 1-7): B23K31/02 B65B31/02 B65B7/28 C03B23/20 C03B29/00 C03C27/00 C03C27/06 H01L23/02 H01L23/10 H05B1/02 H05B3/00 H05B3/22 H05K5/06

CPC: H05B3/00 H01L2224/48091 H01L2224/48247 B65B31/02 G05B19/075 Y10T307/766 G05D23/1904 G05D23/22 H01J9/32 C03B23/20

European class: B65B31/02 C03B23/20 G05B19/07R G05D23/22B2 H01J9/32 H05B3/00

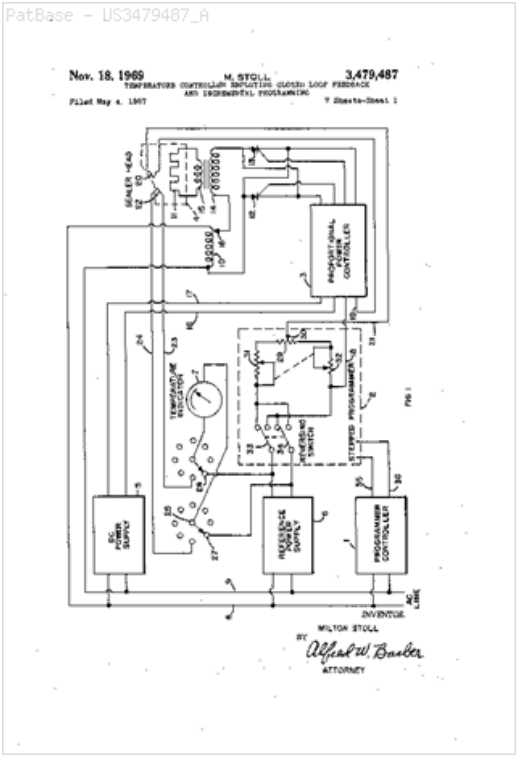
US class: 156/285 156/382 174/52.4 174/564 219/228 219/243 219/462 219/465.1 219/494 228/200 228/234.1 228/246 257/467 257/683 257/688 257/720 257/794 29/49.4 29/494 307/116 445/66 53/427 53/437 53/477 65/139 65/154 65/155 65/162 65/32 65/32.2 65/320 65/34 65/42 65/58 65/59.23

Classification Explorer

Cited documents: US3551127 A, US3490886 A, US3405019 A, US3383260 A, US3371191 A, US3315063 A, US3271124 A, US3060299 A, US2984046 A, US2902796 A, US2882648 A, US2622779 A, JP45034210 A2,

Forward Citations: WO8911419, WO04110867, US9071131, US8893952, US8561879, US8338964, US8232622, US7944955, US7726100, US7660335, US5593532, US5064782, US5040357, US5028295, US4908696, US4872604, US4819857, US4801320, US4561006, US4522666, US4455325, US4255644, US4199340, US4159221, US4111443, US4102481, US3969098, US3913818, US3896542, US3875424, US3791018, US3772900, US3631589, US3569673, US3558909, US2015239767, US2013314955, US2010098121, US2010052096, US2009262767, US2006243384, US2006201539, US2006144022, US2006105494, EP1633632, EP0344137, EP0007928, DE2123378,

Abstract:
Source: US3479487A ABSTRACT OF THE DISCLOSURE
A programmed controller means employing a closed feedback loop and an incremental programmer particularly applied to a heat **sealing** machine in which **packages** to be **sealed** have a complex heat profile. The temperature of the heating means, at any period in time, is sensed by a temperature responsive means and the information is fed back and compared with the programmed demand signals. The heater is than adjusted by means of the device acting to reduce the error between the demand temperature and the sensed temperature. Cross-references to related applications The present application is a continuation-in-part of the application of Milton Stoll entitled "Methods, Apparatus and Systems for Producing Enclosed Devices" filed June 16, 1966 and bearing Ser. No. 558,142. B



296) Family number: 893520 (US3485378A)

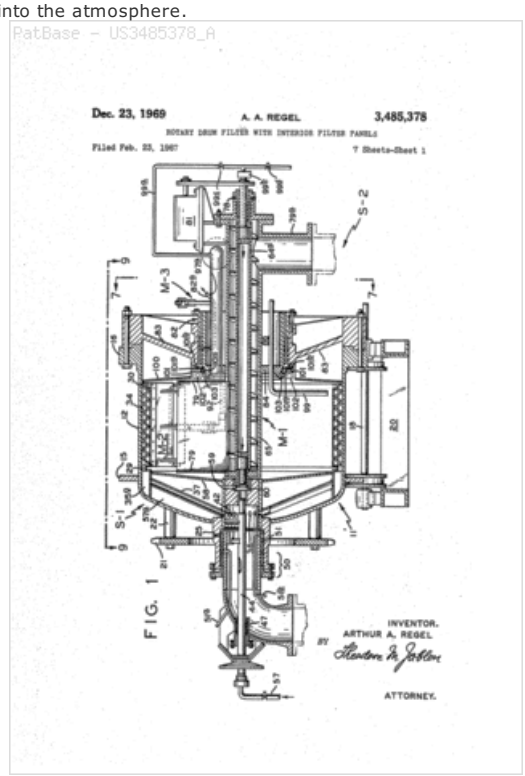
Title:	ROTARY DRUM FILTER WITH INTERIOR FILTER PANELS
Priority:	US19670618178 19670223

Family:

Publication number	Publication date	Application number	Application date
US3485378 A	19691223	US19670618178	19670223

Probable Assignee:	DORR OLIVER INC
Assignee(s):(std):	DORR OLIVER INC
Inventor(s):(std):	REGEL ARTHUR A
Inventor(s):	ARTHUR A REGEL
International class (IPC 8-9):	B01D33/00 (Advanced/Invention); B01D33/00 (Core/Invention)
International class (IPC 1-7):	B01D33/06 B01D33/10 B01D33/36
CPC:	B01D33/466 B01D33/11 B01D33/76
European class:	B01D33/00A1A10B B01D33/00A2A B01D33/00A2B B01D33/10B
US class:	210/393 210/394 210/403
Classification Explorer	
Cited documents:	US3363774 A, US3229815 A, US3080064 A, US2963158 A, US2530503 A, US1870442 A, US1870387 A, US1848445 A, US1531482 A,
Forward Citations:	US9833732, US4320002, US4220536, US4198299, US4182680, US4049386, US4032442, US2015101974,

Abstract:
Source: US3485378A 1. In a rotary drum filter the combination which comprises a drum rotatable about a .horizontal axis, having a cylindrical body portion externally supported for rotation and provided with a Range at one end and with a **closure** wall at the other end, said end **closure** wall having a hub portion concentric with the drum axis, an assembly of filter panels provided upon the interior face of said cylindrical body portion, said panels arranged side by side so as to occupy the interior pcriphery of said body portion, and adapted to have hlter cake formed thereon from a body of pulp maintainable in the drum; a **cover** member detachably fastened to the flanged end of said cylindrical body portion in Huid~tight connections therewith, and having a circular central **opening**; means for rotating the assembly of said drum and **cover** member; a horizontally elongated stationary discharge conduit for filter cake, extending through said **opening** in the **cover** member; a stationary annular member **sealing** surrounding said stationary cake discharge conduit iixed thereto arljacent to said **cover** member for closing the **opening** thereof; means to **seal** the interior of the drum from the exterior thereof to provide a pressure above atmosphere in said drum including an annular **sealing** means concentric with the drum axis, constructed and arranged so as to provide a tiuid-tight **seal** effective between said stationary annular member and the adjacent annular portion of the **cover** member rotating with said drum; ' support means for said cake discharge conduit and said annular member maintaining said conduit and member stationary in predetermined relationship to said drum; a hopper structure in the drum supported by and connected to said discharge conduit, and arranged for receiving filter cake from the tilter panels passing over said hopper structure in the rotation of the drum, said hopper structure extending upwardly from said discharge conduit to an elevation above the pulp level in the drum; conveying means for moving said filter cake from the hopper structure through said discharge conduit from the drum; feed conduit means extending through said stationary annular member for introducing feed pulp into the interior of the drum for filtration and against gas pressure maintained in the interior of the drum; a set of filtrate discharge conduits located adjacent to said end **closure** Wall and converging from the adjacent ends of the filter panels and terminating in t_he hub portion of said end **closure** wall for discharge of the filtrate liquid therethrough; a gas pressure supply conduit extending through said annular member in **sealing** relationship therewith for pressurizing the interior of the drum; and **closure** means associated with said cake discharge conduit for containing the pressure in said drum while discharging cake material into the atmosphere.



297) Family number: 30956221 (US3568865A)

Title: METHOD AND APPARATUS FOR EMPTYING **CONTAINERS** FILLED WITH BULK, LIQUID OR PASTY MATERIAL

Priority: DE19681807295 19681106

Family:

Publication number	Publication date	Application number	Application date
BE740277 A	19700316		19691014
BR6913933 A0	19730130	BR19690213933	19691105
CA927793 A1	19730605	CA19690065887	19691027
CS171681 B2	19761029	CS19690007266	19691104
DE1807295 A1	19700521	DE19681807295	19681106
DK130916 B	19750505	DK19690005758	19691031
DK130916 C	19751103	DK19690005758	19691031
ES173322 U	19720301	ES19710173322U	19711016
ES173322 Y	19730101	ES19710173322U	19711016
ES372781 A1	19720201	ES19690372781	19691022
ES396064 A1	19740516	ES19710396064	19711016
FI51164 B	19760802	FI19690003164	19691104
FI51164 C	19761110	FI19690003164	19691104
FR1599599 A	19700715		19681230
GB1221512 A	19710203	GB19690000303	19690102
IL33240 A0	19691231	IL19690033240	19691022
IL33240 A1	19730629	IL19690033240	19691022
LU59715 A	19700112		19691028
NL151313 B	19761115	NL19690016545	19691103
NL6916545 A	19700511	NL19690016545	19691103
NL7613344 A	19770331	NL19760013344	19761130
NO132190 B	19750623	NO19690004389	19691105
NO132190 C	19751001	NO19690004389	19691105
SE336108 B	19710621	SE19690015241	19691106
SU366598 D	19730116	SU19691356657	19690814
SU366598 T	19730116	SU19691356657	19690814
US3568865 A	19710309		19690206

Probable Assignee: HERMANNS KG WILHELM

Assignee(s):(std)**:** HERMANNO W ; HERMANNS ; HERMANNS KG WILHELM ; HERMANNS W ; HERMANNS WILHELM ; HERMANNS WILHELM KG

Assignee(s): WILHELM HERMANNS STAUBFORDERTECHNIK HRZEUGF ; WILHELM HERMANNS ; WILHELM HERMANNS KG ; WILHELM HERMANNS PORZ URBACH BONDSREPUBLIEK DUITSL ; WILHELM HERMANNS TE PORZ URBACH BONDSREPUBLIEK DUI ; WILHELM HERMANNS STAUBFORDERTECHNIK FAHRZEUGFABRIK ; WILHELM HERMANNS PORZ URBACH BONDSREPUBLIEK DUITSLAND ; WILHELM HERMANNS TE PORZ URBACH BONDSREPUBLIEK DUITSLAND ; GUNTER WILLMROTH

Inventor(s):(std)**:** WILLMROTH G ; WILLMROTH GUNTER ; WILLMROTH GUENTER ; WILMROTH GUENTHER ; HERMANNS WILHELM ; HERMANNS W

Inventor(s): GUNTER WILLMROTH ; GUENTER WILLMROTH ; WILHELM HERMANNS

Agent(s): AE MULFORD

International class (IPC 8-9): B65D88/54 B65G53/50 B65G67/24 (Advanced/Invention); B65D88/00 B65G53/40 B65G67/02 (Core/Invention)

International class (IPC 1-7): B65B B65D87/00 B65D87/28 B65D88/72 B65G53/36 B65G53/50 B65G65/24 B65G65/40 B65G65/72 B65G67/24 B65G67/30 B65G67/34 B65J

CPC: B65D88/54 B65D88/548

European class: B65D88/54 B65D88/54D

US class: 414/416.09 414/421 414/811

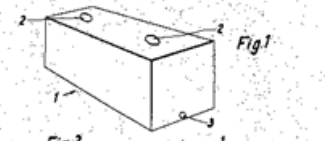
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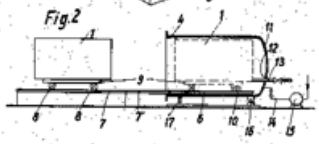
Cited documents: US3294265 A, US3260389 A, US3147041 A, US2726137 A,

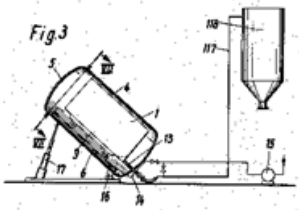
Forward Citations: US7544018, US7186062, US7033124, US6709217, US6709216, US6702539, US6698989, US4390040, US3774792, US2008128173, US2007166113, US2004096298, US2004086360, US2004086345, NO340075, FR2170877, FR2170877, DE3030657,

Abstract:
Source: GB1221512A 1,221,512. Pneumatically emptying containers. W. HERMANNS. 2 Jan., 1969 [6 Nov., 19681, No. 303/69. Heading B8A. [Also in Division F1] To empty a container 1, filled with bulk, liquid or pasty material, the container is placed in a sealed pressure vessel 4, the interior of the container is connected with that of the vessel 4, and either compressed air is supplied to the vessel 4 through a line 14 causing the contents of the container to be forced through a discharge pipe 13 or the interior of the vessel 4 is connected to atmosphere and suction is applied to the pipe 13. In the embodiment shown in Fig. 2, the container is placed on a trolley 9 which is then conveyed along tracks 7, 7^1 on to tracks 6 in the vessel 4. Material inlets in the top of the container are opened and a removable end wall is secured to the vessel 4. The track section 7^1 is then removed and the vessel 4 is tilted about an axis 16 by an hydraulic ram 17. In a second embodiment, Fig. 4, the pressure vessel comprises two halves running on track sections 18-20 and supporting a trolley 24. In operation, the container 1 is lowered on to the trolley in the position shown and the two halves 21, 22 of the vessel are coupled together on the track section 19 which is then tilted about an axis 25 by a ram 26, Fig. 6 (not shown). The container is then emptied as in the previous embodiment. The container may contain a flexible bag for the transportation of liquid or pasty material, Fig. 8 (not shown), and may contain fluidizing means for granular material.

PatBase - US3568865_A







Inventor:
GUNTER WILLMROTH

ATTORNEYS

298) Family number: 97837 (US3597237A)

Title: METHOD FOR **PACKAGING** FOOD PRODUCTS IN FLEXIBLE **CONTAINERS**

Priority: IT19680053661 19681028

Family:

Publication number	Publication date	Application number	Application date
AT309332 B	19730810	AT19690010168	19691028
BE740838 A	19700401		19691027
BR6913685 A0	19730215	BR19690213685	19691027
CH504346 A	19710315	CH19690015630	19691020
DE1953747 A1	19700521	DE19691953747	19691024
DE1953747 C3	19760826	DE19691953747	19691024
DE1966277 A1	19720810	DE19691966277	19691024
ES372930 A1	19720301	ES19690372930	19691027
ES372967 A1	19720316	ES19690372967	19691027
FR2021708 A1	19700724	FR19690036726	19691027
GB1238276 A	19710707		19691024
IE33351 B	19740529	IE19690001442	19691021
IE33351 L	19700428	IE19690001442	19691021
IL32555 A0	19690925	IL19690032555	19690706
IL32555 A1	19721029	IL19690032555	19690706
LU59698 A	19700112		19691024
NL6915991 A	19700501	NL19690015991	19691023
NO128366 B	19731105	NO19690004241	19691027
US3597237 A	19710803	US19690795469	19690131

Probable Assignee: STAR STABILIMENTO ALIMENTARE

Assignee(s):(std)**:** STAR STABILIMENTO ALIMEN ; STAR STABILIMENTO ALIMENTARE

Assignee(s): STAR STABILIMENTO ALIMENTARE IT SPA ; STAR STABILIMENTO ALIMENTARE S P A ; STAR STABILIMENTO ALIMENTARE SP A ; STAR STABILIMENTO ALIMENTARE SPA ; STAR STABILIMENTO ALIMENTARE SPA IT

Inventor(s):(std)**:** GIOVANNI NUGHES ; NUGHES GIOVANNI ; NUGHES G

Inventor(s): STAR STABILIMENTO ALIMENTARE SPA ; NUGHES G IT

Agent(s): REINHOLD COHN AND PARTNERS

International class (IPC 8-9): B29C65/18 B29C65/82 B32B27/00 B65B57/00 (Advanced/Invention);
B29C65/38 (Advanced/Non-invention);
B29C65/00 B29C65/18 B32B27/00 B65B57/00 (Core/Invention);
B29C65/38 (Core/Non-invention)

International class (IPC 1-7): B25B B29C27/06 B32B27/00 B32B27/06 B32B7/00 B65B11/00 B65B3/02 B65B31/00 B65B31/02 B65B43/04 B65B51/10 B65B51/30 B65B55/00 B65B9/02 B65B9/08

CPC: B29C65/8246 B29C65/224 B29C65/18 B29C65/38 B29C65/82 B29C66/80 B32B27/00 B65B57/00 B29C65/305 B29C66/91212 B29C66/91231 B29C66/91421 B29C66/91431 B29C66/91641 B29C66/91655 B29C66/81419 B29C66/836 B29C66/961 B29C66/8322 B29C66/43121 B29C66/1122 B29C66/431 B29C66/849 B29C66/71 B29C66/712 B29C66/72321 B29C66/72341

European class: B29C65/18 B29C65/82 B29C66/80 B32B27/00 B65B57/00 L29C65/38

US class: 426/126 426/232 426/412 426/415 53/425 53/433 53/440 53/450 53/455 53/479 99/171

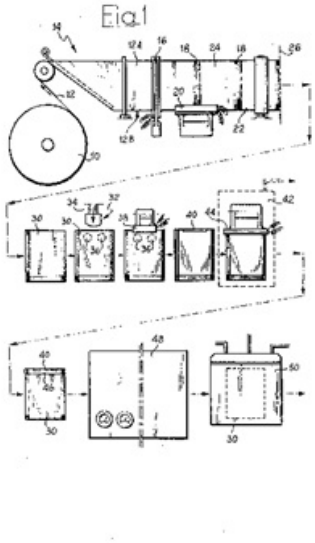
Classification Explorer

Forward Citations: US8349420, US6354142, US5799463, US5571370, US5195298, US5195294, US5137763, US5093164, US5002811, US4998400, US4894266, US4881360, US4862675, US4817366, US4710157, US4323586, US4291085, US2011117302, JP7002234, JP3586290, GB2174970, FR2702742, FR2663910, FR2581026, FR2508873, FR2384617, EP0634328, EP0465329, EP0465329, EP0116328, EP0116328, EP0069642, DK152749, DE2911605, DE2528607, DE2455064, DE202005005126, DE19642099,

Abstract:
Source: US3597237A ABSTRACT OF THE DISCLOSURE
Method of **packaging** a foodstuff in a sterilizable **container** of the envelope-type made of a flexible laminate comprising an inner, heat-**sealable** polypropylene layer, wherein all sides of the envelope are fluid tight **sealed** by a twin-bar heat-**sealing** system, and wherein the closing side of the filled envelope is twin-bar **sealed** in vacuum by a heat impulse after the side has been clamped flat between its **sealing** bars in cool condition of the latter. The method also include stitch-**sealing** the lips of the envelope on its closing side after filling, preparatory to the heat impulse **sealing**, as well as sterilizing the **sealed** **package** and chromatographically testing it for leakage.

PatBase - US3597237_A

Fig. 1



299) Family number: 95008 (US3566946A)

Title: Y-FLANGED **CONTAINERS** AND **COVER** MEMBERS THEREFOR

Priority: CA19680027206 19680809

Family:

Publication number	Publication date	Application number	Application date
BE737332 A	19700116		19690811
CA858334 A	19701215	CA19680027206	19680809
DE1936687 A1	19700212	DE19691936687	19690718
DK127872 B	19740128	DK19690004303	19690811
FR2015350 A1	19700424	FR19690026566	19690801
GB1237351 A	19710630	GB19690000057	19690101
IE33516 B	19740724	IE19690001114	19690807
IE33516 L	19700209	IE19690001114	19690807
JP52002345 B4	19770121	JP19690062408	19690808
MY7400276 A	19741231	MY19740000276	19741230
NL154704 B	19771017	NL19690011911	19690805
NL6911911 A	19700211	NL19690011911	19690805
NO126125 B	19721227	NO19690003224	19690807
SE351610 B	19721204	SE19690011082	19690808
US3566946 A	19710302	US19680787050	19681226

Probable Assignee: MCDONALD JAMES IAN

Assignee(s):(std)**:** MACDONALD JAMES IAN ; MAC DONALD JAMES ; MACDONALD JAMES I ; MACDONALD J ; MAC DONALD J ; JAMES IAN MAC DONALD ; JAMES IAN MACDONALD ; MC DONALD J ; MAC DONALD JAMES IAN ; MCDONALD JAMES IAN

Assignee(s): JAMES IAN MACDONALD CALGARY CANADA ; JAMES IAN MC DONALD ; JAMES I MACDONALD

Inventor(s):(std)**:** MAC DONALD J ; MACDONALD J ; MACDONALD JAMES IAN ; DONALD JAMES IAN MAC ; IAN MCDONALD JAMES ; MACDONALD JAMES I

Inventor(s): JAMES I MACDONALD ; JAMES IAN MAC DONALD ; JAMES IAN MACDONALD

International class (IPC 8-9): B65D41/16 B65D41/28 B65D43/02 (Advanced/Invention); B65D41/02 B65D43/02 (Core/Invention)

International class (IPC 1-7): B65D1/16 B65D11/06 B65D11/26 B65D41/16 B65D41/18 B65D43/02 B65D43/08 B65D43/10 B65D45/00 B65D5/00 B65D53/00 B65D85/72

CPC: B65D43/0206 B65D2543/00037 B65D2543/00092 B65D2543/00296 B65D2543/00462 B65D2543/00509 B65D2543/00527 B65D2543/00546 B65D2543/0062 B65D2543/00685 B65D2543/0074 B65D2543/00759 B65D2543/00768 B65D2543/00796 B65D2543/00833

European class: B65D43/02S3A L65D543/00Y10B L65D543/00Y1C L65D543/00Y1F2C L65D543/00Y1M6 L65D543/00Y8A1 L65D543/00Y8D1C L65D543/00Y8D1N L65D543/00Y8D3N L65D543/00Y8S1B2 L65D543/00Y8S1D2 L65D543/00Y8S3B10 L65D543/00Y8S3B4 L65D543/00Y8S3B8 L65D543/00Y8S3D2

US class: 150/05 220/659 220/783

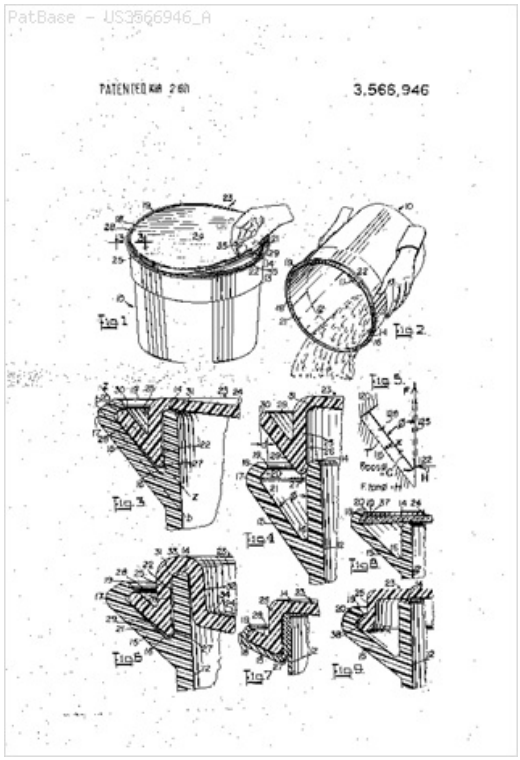
Classification Explorer

Forward Citations: WO8202183, WO12141661, US8777052, US8418870, US8205768, US6491185, US6250494, US5964372, US5806710, US5713484, US5437386, US5411160, US5303839, US5185008, US4928881, US4893452, US4836407, US4524882, US4460363, US4260065, US4192434, US4182475, US4124141, US4105136, US4043482, US3862505, US2010108705, US2009223986, US2007114236, JP57014768, ITBS20110059, GB2137598, FR2507569, EP2514679, EP0798226, EP0280488, EP0253456, EP0132897, DE4306707, DE3312495, DE2904636, DE2654903, DE2558091, DE19902372, DE19902372, CN103620047, AT381678,

Abstract:

Source: GB1237351A 1,237,351. **Container** **closures**. J. I. MACDONALD. 1 Jan., 1969 [9 Aug., 1968], No. 57/69. Heading B8T. [Also in Divisions A4 and F2] A **container** which may be formed of a flexibly distortable material, e.g. linear high density polyethylene, comprises an annular flange 15 and an upwardly inturned hook flange 18 that cooperate with a **cover** 23 of similar material. The **cover** is removed by a **tab** 35, Fig. 1 (not shown). Alternative forms of **cover** are described: a **cover** whose crown accommodates the base of a **container**, Fig. 6 (not shown), a flat disc suitable for small variations of internal pressure, Fig. 8 (not shown), and a **cover** that co-operates with a hook flange 18 which is disposed below the rim, Fig. 9 (not shown). Alternatively, the **container** can be made of metal, in which case the **cover** is made of a flexibly distortable material, Fig. 7 (not shown).

PatBase - US3566946_A



300) Family number: 325003 (US3622397A)

© PatBase

Title: FAST RECHARGEABLE **SEALED** NICKEL-CADMIUM BATTERY CELLS COMBINED WITH EXCESS PRESSURE AND TEMPERATURE CONTROLS

Priority: US19680750796 19680807

Family:

Publication number	Publication date	Application number	Application date
CA929220 A1	19730626	CA19690056368	19690707
DE1939360 A1	19700326	DE19691939360	19690801
FR2015205 A1	19700424	FR19690025833	19690729
GB1269115 A	19720406	GB19690031861	19690624
NL6912010 A	19700210	NL19690012010	19690806
US3622397 A	19711123	US19680750796	19680807

Probable Assignee: SONOTONE CORP

Assignee(s):(std)**:** MARATHON MFG CO ; MARATHON MFG COMPANY ; SONOTONE CORP

Assignee(s): LOUIS BELOVE ; MARATHON MANUFACTURING CO ; MARATHON MANUFACTURING COMPANY

Inventor(s):(std)**:** BELOVE L ; BELOVE LOUIS

Inventor(s): LOUIS BELOVE

International class (IPC 8-9): H01M10/42 (Advanced/Invention);
H01M6/50 (Advanced/Non-invention);
H01M10/42 (Core/Invention);
H01M6/00 (Core/Non-invention)

International class (IPC 1-7): H01M1/02 H01M1/06 H01M31/04 H01M43/04 H01M45/00 H01M45/04 H02J7/02

CPC: H01M10/42 H01M2200/10 H01M2200/20

European class: H01M10/42 T01M200/10 T01M200/20 Y02E60/12

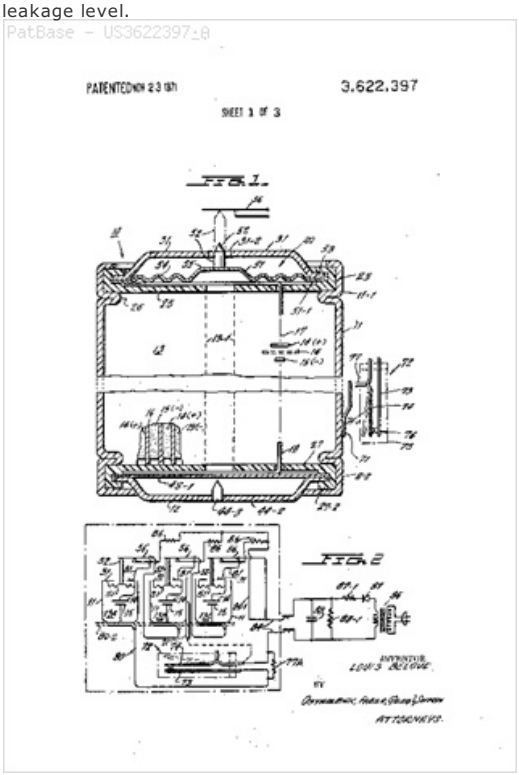
US class: 136/178 429/55 429/58 429/62

Classification Explorer

Cited documents: US3470025 A, US3373057 A, US3081366 A, US2289128 A,

Forward Citations: WO9934456, WO9601505, US8551632, US8071230, US7859220, US7763375, US7288920, US6878481, US6841745, US6080506, US5569554, US5418082, US5407555, US5290640, US5242565, US4965144, US4943497, US4338382, US4112201, US4035552, US4028478, US4025696, US3939011, US3933526, US3885991, US2013280569, US2013071707, US2009053586, US2008254343, US2007275298, US2007212595, US2006275657, US2006273876, US2005191542, US2005088140, US2004145344, US2004065536, JP56015565, GB2305292, GB2305292, EP1050080, EP0573998, EP0364995, EP0364995, DE3206607, DE2907167, DE2557455, DE2255583, DE102014200197,

Abstract:
Source: GB1269115A 1,269,115. Charging batteries. MARATHON MFG. CO. 24 June, 1969 [7 Aug., 1968], No. 31861/69. Heading H2H. [Also in Division H1] A cell charging circuit 80 for high fast recharging of **sealed** Ni-Cd cells 13A, 13B, 13C, includes serially individual excess-pressure charge cut-off means 52-56, common excesstemperature charge cut-off means 71-74, which cut-off or reduce the charging current to leakage charge level in response to excessive pressure or temperature rise respectively in the cells, and leads which connect the cells in series. The charging current is delivered by a conventional rectified A.C. supply circuit including rectifier 87 and adjustment resistance 87-1 connected to cell input terminals 84, capacitor 88 which absorbs charge surges. Circuit leads each including resistance 86 are connected in shunt between **cover** terminal 31 of each cell and the circuit lead 85-1 of cell input terminal 84 to reduce the fast charging current to a lower leakage level when pressure switch 56 of any cell is **opened**. When the cell pressure drops the fast recharging current is restored. When the cell temperature reaches a certain maximum the temperature-deformed bimetal switch member 71 activates its switch 72 to **open** the circuit 80. Shunting resistance 77 connected across switch 72 reduces the charging current to leakage level.



301) Family number: 1071303 (US3647485A)

© PatBase

Title: **PACKAGE** AND METHOD OF MAKING SAME

Priority: US19680754361 19680821 US19720223986 19720207

Family:

Publication number	Publication date	Application number	Application date
AU197246093 A1	19740307	AU19720046093	19720829
BE788975 A	19730115		00000000
BE788975 A1	19730115	BE19720122154	19720918
CA1018101 A1	19770927	CA19720150456	19720829
CA921875 A1	19730227	CA19690049414	19690422
DE1937993 A1	19700226	DE19691937993	19690725
DE2249803 A1	19730816	DE19722249803	19721011
ES406789 A1	19760216	ES19720406789	19720918
ES436625 A1	19770116	ES19750436625	19750415
FR2171705 A5	19730921	FR19720034240	19720927
GB1272602 A	19720503	GB19690020439	19690422
GB1406457 A	19750917	GB19720040883	19720904
IT975251 A	19740720	IT19720070233	19721013
JP48089095 A2	19731121	JP19720101196	19721011
JP59074077 A2	19840426	JP19830163100	19830905
US3647485 A	19720307	US19680754361	19680821
US3836679 A	19740917	US19720223986	19720207

Probable Assignee: MAYER AND CO INC O

Assignee(s):(std)**:** MAYER AND CO INC O ; MAYER OSKAR FOODS

Assignee(s): MAYER OSCAR CO INC US ; MAYER O AND CO INC US ; MAYER CO INC OSCAR ; OSCAR MAYER AND CO ; MAYER O AND CO INC ; MAYER O ; OSCAR E SEIFERTH ; OSCAR MAYER AND CO INC MADISON WIS V ST A ; OSCAR MAYER FOODS CORP ; OSCAR MAYER AND CO INC 910 MAYER AVENUE MADISON ; OSCAR MAYER AND CO INC ; OSCAR MAYER AND CO INC 910 MAYER AVENUE MADISON WISCONSIN 53701 E U A ; SEIFERTH OSCAR E ; RADLOFF HARRY L ; PAUL E GRINDROD ; ROBERT L GOLLER ; OSCAR MAYER AND COINC ; GOLLER ROBERT L ; GRINDROD PAUL E ; HARRY L RADLOFF

Inventor(s):(std)**:** GRINDROD PAUL E ; GOLLER ROBERT L ; GRINDROD P ; GRINDROD P E ; GOLLER R ; GOLLER R L ; RADLOFF H ; RADLOFF H L ; SEIFERTH OSCAR E ; ROBAATO ERU GOORAA ; POORU II GURINTOUTSUDO ; OSUKAA II SEIFUAASU ; HARII ERU RADOROFU ; LOUIS GOLLER ROBERT ; LEE RADLOFF HARRY ; EUGENE SEIFERTH OSCAR ; EDWARD GRINDROD PAUL ; RADLOFF HARRY L ; SEIFERTH O ; SEIFERTH O E

Inventor(s): SEIFERTH O US ; RL GOLLER ; ROBERT L GOLLER ; RADLOFF H US ; GOLLER R US ; GRINDROD P US ; H L RADLOFF ; HARRY L RADLOFF ; HL RADLOFF ; O E SEIFERTH ; OE SEIFERTH ; OSCAR E SEIFARTH ROBERT L GOLLER PAULE GRINDROD HARRY L RADLOFF ; OSCAR E SEIFERTH ; P E GRINDROD ; PAUL E GRINDROD ; PE GRINDROD ; R L GOLLER

International class (IPC 8-9): B65B11/50 B65B9/04 B65D65/40 B65D75/26 B65D75/30 B65D75/32 B65D75/36 B65D75/58 B65D75/64 B65D77/38 (Advanced/Invention);
B65D65/40 B65D75/26 (Advanced/Non-invention);
B65B11/50 B65B9/00 B65D65/40 B65D75/28 B65D75/52 B65D77/22 (Core/Invention);
B65D75/26 (Core/Non-invention)

International class (IPC 1-7): B65B11/00 B65B11/50 B65B25/06 B65B3/02 B65B51/10 B65B9/04 B65D11/00 B65D6/00 B65D65/38 B65D65/40 B65D75/00 B65D75/30 B65D81/34 B65D85/00

CPC: B65D75/326 B65D75/58 B65D2575/3245 Y10T428/3192 B65D75/324 B65D75/366 B65D2575/365 B32B7/08 B32B15/082 B32B15/12 B32B15/20 B32B27/08 B32B27/304 B32B27/306 B32B2250/24 B32B2307/7242 B32B2327/06 B32B2331/04 B32B2439/70 B65B9/04 B65D75/26 B65D75/32 B65D75/5855

European class: B65B9/04 B65D75/32 B65D75/32B3B B65D75/32D1 B65D75/36F B65D75/58 B65D75/58F L65D575/32Y1D L65D575/36Y1D L65D75/26

US class: 156/306 156/306.3 156/308.4 161/252 206/443 426/121 426/123 426/126 426/127 426/129 426/412 426/415 428/518 53/133.3 53/442 99/171LP 99/174 991/740

Classification Explorer

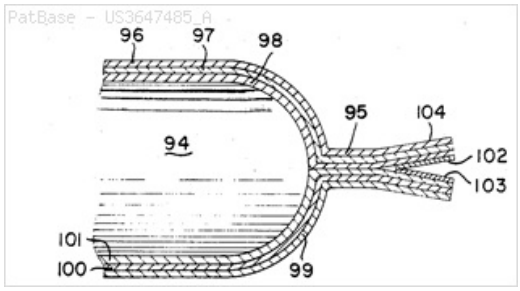
Cited documents: US3496061 A, US3467296 A, US3454210 A, US3454158 A, US3340091 A, US3338739 A, US3330670 A, US3322614 A, US3228168 A, US3131069 A, US2919059 A, US2834686 A,

Forward Citations: WO9217382, WO9005683, USB237953, US9005391, US8523437, US7611770, US7604828, US7320545, US7313900, US7165887, US7086782, US6913387, US6910806, US6360513, US5833061, US5582853, US5558891, US5545420, US5514029, US5502946, US5454207, US5405629, US5356397, US5352466, US5238306, US5188461, US5167974, US5107658, US5103979, US5050736, US5014856, US5005707, US4969967, US4925318, US4901505, US4899519, US4889731, US4875587, US4866911, US4839235, US4823961, US4782951, US4729476, US4568403, US4456164, US4387135, US4382513, US4278738, US4273815, US4260854, US4183964, US4151328, US4082877, US4069348, US4057667, US3991168, US3924051, US3891089, US3713849, US2010314036, US2008260917, US2007166491, US2006246185, US2006230708, US2006113305, US2004031717, US2003113415, US2003096042, US2003072852, US2001017947, JP51122595, FR2660287, FR2527168, FR2351877, FR2351877, EP2989022, EP1472155, EP1472155, EP0608910, EP0457629, EP0452052, EP0328245, EP0328245, EP0196799, DE4402038, DE3812118, DE3312519, DE2247157,

Abstract:

Source: US3647485A A hermetically **sealed** **package** and method of making the same which **package** includes a breakaway or peelable **seal** formed between an ethylene-polar monomer copolymer film or coating material, such as, ethylene-vinyl acetate, and a thermoplastic film, such as, polyvinylidene chloride. Preferably, during **seal** formation, the **seal** interface is heated to a temperature between the melt temperatures of the film materials which make up the **seal** to provide improved **sealing** without destroying the breakaway property or peelability of the **seal** so formed.

PatBase - US3647485_A



302) Family number: 743026 (US3499588A)

Title: PLASTIC **CONTAINER** TOP WITH COMBINATION **CLOSURE** AND SPRINKLER

Priority: US19680778390 19681125 US19680778463 19681125 US19680778562 19681125 US19690838927 19690703

Family:

Publication number	Publication date	Application number	Application date
BR6913198 A0	19730201	BR19690213198	19691009
GB1286495 A	19720823	GB19690047489	19690926
US3499588 A	19700310	US19680778562	19681125
US3529752 A	19700922	US19680778390	19681125
US3563417 A	19710216	US19680778463	19681125
US3563426 A	19710216	US19690838927	19690703

Probable Assignee: MORTON INT INC

Assignee(s):(std)**:** MORTON INT INC ; MORTON INTERNAT INC

Assignee(s): MORTON INTERN INC ; MORTON INTERNATIONAL INC

Inventor(s):(std)**:** BARTILSON B ; BARTILSON BENJAMIN M ; BOLDT R ; BARTILSON BENJAMIN MATTHIAS ; JORDAN ROBERT H ; BOLDT ROBERT F ; JORDAN R ; JORDAN ROBERT HOWARD ; BOLDT ROBERT FRANCIS ; TRUMBULL HAROLD E ; NYQUIST MAYNARD E ; TRUMBELL H ; NYQUIST M ; TRUMBULL HAROLD ELLSWORTH ; NYQUIST MAYNARD EMANUEL

Inventor(s): ROBERT H JORDAN ; ROBERT F BOLDT ; ROBERT HOWARD JORDAN ; ROBERT FRANCIS BOLDT ; MAYNARD EMANUEL NYQUIST ; HAROLD E TRUMBULL ; MAYNARD E NYQUIST ; HAROLD ELLSWORTH TRUMBULL ; BENJAMIN M BARTILSON ; BENJAMIN MATTHIAS BARTILSON

International class (IPC 8-9): A47G19/24 B65D47/08 (Advanced/Invention); A47G19/00 B65D47/08 (Core/Invention)

International class (IPC 1-7): A47G19/24 B65D47/00 B65D47/06 B65D8/02 B65D83/06 B67D3/00

CPC: B65D47/0847 A47G19/24

European class: A47G19/24 B65D47/08B4F

US class: 222/189 222/189.02 222/480 222/487 222/556 222/565 D7/591

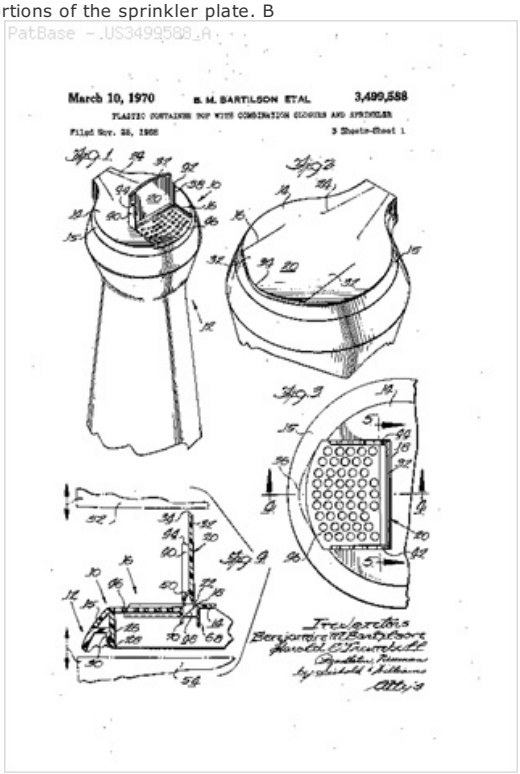
Classification Explorer

Cited documents: US3499588 A, US3409188 A, US3370757 A, US3217949 A, US3185359 A, US3140019 A, US3036746 A, US3031107 A, CA771996 A,

Forward Citations: USRE31418, USD714144, USD687713, USD614488, USD582274, USD582273, USD558517, USD533452, USD532691, USD532298, USD530610, USD513452, USD509426, USD480268, USD465732, USD453892, US9868572, US9475623, US8955705, US8899437, US7134575, US7007830, US6364169, US6036389, US5975368, US5467879, US5339993, US5193722, US5120454, US5054663, US4984720, US4925067, US4897032, US4730751, US4721070, US4714181, US4653672, US4558806, US4494679, US4440322, US4148418, US3814296, US3563426, US2011011867, US2007215652, US2007007310, US2004226950, US2004134942, FR2624099, EP2110061, EP0258757, DE2810624,

Abstract:

Source: US3499588A ABSTRACT OF THE DISCLOSURE
This low-cost, one-piece integrally molded plastic **container** top for **containers** of particulate substances such as salt features a wall member having an **opening** with a hingedly-attached **cover** and a recessed perforated sprinkler plate across the **opening**. Access **openings** for mold parts adjacent the sprinkler plate are effectively **sealed** by a projecting curved surface on the **cover** adjacent the hinge portion, which curved surface cooperates with edge portions of the sprinkler plate. B



303) Family number: 19181392 (US3577699A)

Title: METHOD OF CARTONING

Priority: GB19680044074 19680917

Family:

Publication number	Publication date	Application number	Application date
AT299812 B	19720710	AT19690008773	19690916
BE739004 A	19700317		19690917
CH494678 A	19700815	CH19690013573	19690908
DE1947682 A1	19700402	DE19691947682	19690916
DK122800 B	19720417	DK19690004939	19690916
ES176775 U	19720816	ES19690176775U	19690906
ES176775 Y	19730401	ES19690176775U	19690906
FI57369 B	19800430	FI19690002578	19690908
FI57369 C	19800811	FI19690002578	19690908
FR2018269 A1	19700529	FR19690031613	19690917
GB1273350 A	19720510	GB19680044074	19680917
HU163565 P	19730927	HU1969KE00857	19690915
JP49034058 B4	19740911	JP19690072048	19690912
NL159056 B	19790115	NL19690014046	19690916
NL6914046 A	19700319	NL19690014046	19690916
NO127229 B	19730528	NO19690003691	19690916
SE344560 B	19720424	SE19690012703	19690916
US3577699 A	19710504	US19690855283	19690904

Probable Assignee: KEYOLOK CO INC

Assignee(s):(std)**:** KEYOLOK CO INC ; KEYOLOK CO INC DOVER US ; KEYOLOR CO INC ; PAXALL ; PAXALL INC CHICAGO ILLINOIS VER ST V AM ; STANLEY MILTON SILVER ; PAXALL INC

Assignee(s): THIELE ENGINEERING CO ; KEYOLOK COINC ; KEYOLOK CO INC DOVER

Inventor(s):(std)**:** MILTON SILVER STANLEY ; SILVER S ; SILVER STANLEY MILTON ; STANLEY MILTON SILVER ; STANLEY MILTON SILVER LONDON

International class (IPC 8-9): B31B7/00 B65B3/02 B65B7/00 B65D5/56 B65D65/40 (Advanced/Invention);
B31B7/00 B65B3/00 B65B7/00 B65D5/56 B65D65/40 (Core/Invention)

International class (IPC 1-7): B31B1/60 B31B3/60 B31B49/02 B31B5/60 B31B7/26 B31B7/60 B65B11/58 B65B51/00 B65B7/16 B65B7/20 B65D5/00 B65D5/02 B65D5/40 B65D5/56

CPC: B65D5/563

European class: B65D5/56B

US class: 493/100 493/189 53/175 53/27 53/284 53/449

Classification Explorer

Cited documents: US734224 A, US3513618 A, US3481098 A, US3425324 A, US3411694 A, US2329311 A, US2202213 A, US1277928 A,

Forward Citations: US7290382, US6536190, US6416223, US5314088, US4918906, US4881360, US4817366, US4776147, US4648509, US4484431, US4478351, US4322931, US4189986, US4046308, US2006288668, JP50054459, FR2508415, DE102005015125,

Abstract:
Source: US3577699A A **package** is described wherein the contents are hermetically **sealed** in an inner lining of moisture resistant flexible sheeting material, which is wholly contained in a closed and **sealed** **container** of a substantially rigid material, such as boxboard, and yet the flexible sheeting initially constituted a layer **sealed** over the entire area of the board by means of a thermoplastic coating such as a microcrystalline wax. The lining remains **sealed** over a substantial area of the board after completion of the **package**. The **package** is rectangular and formed from a single unitary blank, the ends of the **container** being closed by flaps that have been severed from one another and, over the major portion of their area, detached from the inner lining by the heating of the thermoplastic coating which is then absorbed in the boxboard material. The inner lining is **sealed** at each end by means of fin **seals** with web-gusseted ends. These are created by inwardly folding the ends of the **container** before the flaps are severed from one another, this initial folding involving gusset folding and the subsequent folding, after the severance of the flaps, being that of ordinary dust flaps and **cover** flaps. The fin **seals** are heat **sealed** when the heat is applied to strip the neighboring boxboard from the flexible material.

PatBase - US3577699-A

FIG. 1.

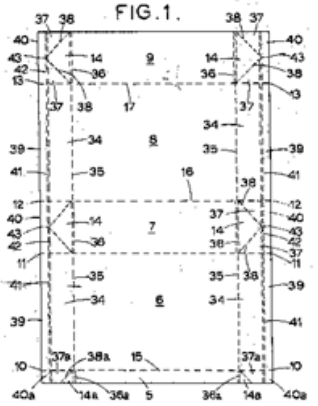
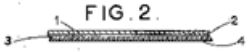


FIG. 2.



304) Family number: 1019136 (US3527634A)

Title:	TAPE APPLICATOR FOR APPLYING TAPE ACROSS **COVER** AND BODY OF A **CONTAINER**
Priority:	US19660606508 19661229 US19690869433 19690917

Family:

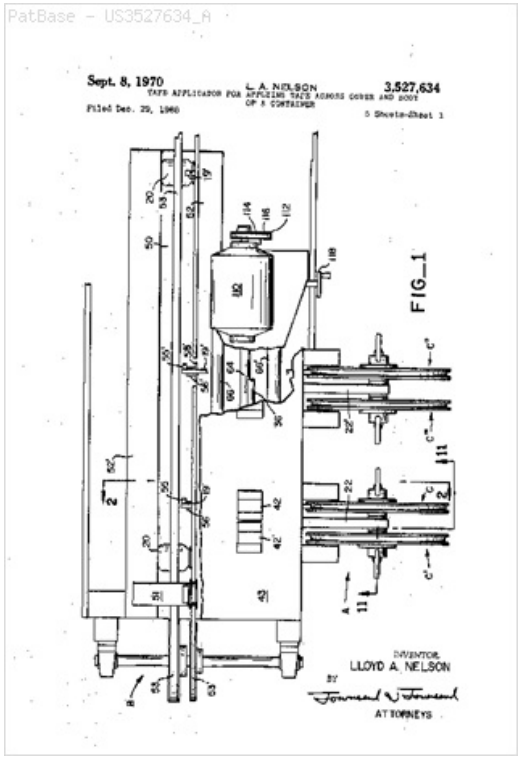
Publication number	Publication date	Application number	Application date
GB1185398 A	19700325	GB19670043527	19670925
GB1185399 A	19700325	GB19690047179	19670925
US3527634 A	19700908	US19660606508	19661229
US3686052 A	19720822	US19690869433	19690917

Probable Assignee:	GERBER PROD
Assignee(s):(std):	GERBER PROD ; THOMAS P FR
Assignee(s):	GERBER PRODUCTS CO ; GERBER PRODUCTS COMPANY
Inventor(s):(std):	NELSON LLOYD A
Inventor(s):	LLOYD A NELSON
International class (IPC 8-9):	B65B7/28 B67B5/03 (Advanced/Invention); B65B7/28 B67B5/00 (Core/Invention)
International class (IPC 1-7):	B29C17/04 B65B7/28 B65C3/00 B65C3/24 B65C9/18 B65D85/72 B65H25/12
CPC:	Y10T156/171 B65B7/2864 B67B5/03 Y10T156/1028 Y10T156/1961
European class:	B65B7/28F2 B67B5/03
US class:	156/212 156/361 156/483 156/506 156/542 156/584 156/761 206/205 206/409 53/419 623/35

Classification Explorer

Cited documents:	US3077919 A, US2743064 A, US2512579 A, US2407641 A, US2363277 A, US2343148 A, US2317943 A,
Forward Citations:	US7555874, US4230519, DE3311170, DE102005015703,

Abstract:
Source: US3527634A ABSTRACT OF THE DISCLOSURE
A device for applying a segment of pressure sensitive adhesive tape across the **cover** and body portion of a reclosable food **container** as the **containers** are advanced 15 along a path. The tape is simultaneously advanced along a transverse path so that each **container** rolls across the tape. The path is provided with a raised area complemen-tary to at least a portion of the contour of the **container**. In one embodiment the tape is advanced into the path 20 by drawing upon the backing strip adhesively secured to the tape.



305) Family number: 3823866 (US3628301A)

Title: CLOSURING **CONTAINERS**

Priority: BE19680051058 19681028 GB19680051058 19681028 GB19690051058 19690915 US19690868162 19691021 GB19710051058 19711028 GB19710030386 19710629 US19710184697 19710929

Family:

Publication number	Publication date	Application number	Application date
BE740861 A	19700427		19691027
DE1953420 A1	19701022	DE19691953420	19691023
DE1953420 B2	19741031	DE19691953420	19691023
DE1953420 C3	19750612	DE19691953420	19691023
FR2021736 A1	19700724	FR19690036891	19691028
GB1241425 A	19710804	GB19680051058	19681028
GB1369257 A	19741002	GB19710030386	19710629
JP48076684 A2	19731015	JP19720064380	19720627
NL6915818 A	19700501	NL19690015818	19691020
SE363272 B	19740114	SE19690014672	19691027
US3628301 A	19711221	US19690868162	19691021
US3724161 A	19730403	US19710184697	19710929
US3800502 A	19740402	US19710148471	19710601

Probable Assignee: SIDAPLAX NV

Assignee(s):(std)**:** SIDAPLAX ; SIDAPLAX NV ; SIDAPLAX S A

Assignee(s): SIDAPLAX SA ; SIDAPLAX NV BE ; SIDAPLAX BE NV ; SIDAPLAX N V ; SIDAPLAX N V GENTBRUGGE BELGIEN

Inventor(s):(std)**:** VERMEULEN EMILE RAYMOND ; VERMEULEN E

Inventor(s): EMILE RAYMOND VERMEULEN ; VERMEULEN E BE ; VERMEULEN EMILE RAYMOND GENT BELGIEN

International class (IPC 8-9): B29C65/18 B29C65/48 B31B17/00 B65B51/00 B65B51/10 B65B7/16 B65B7/28 B65D41/24 B65D77/20 (Advanced/Invention);
B29C65/18 B29C65/48 B31B17/00 B65B51/00 B65B51/10 B65B7/16 B65B7/28 B65D41/02 B65D77/10 (Core/Invention)

International class (IPC 1-7): B29C24/00 B29C27/12 B29C27/20 B31B17/60 B65B53/00 B65B53/02 B65B61/18 B65B7/00 B65B7/16 B65B7/28 B65D41/24 B65D85/00 B67B3/02 B67B3/10

CPC: B65B7/28 B65B7/2878 B65B7/2885 B29C66/8181 B29C65/18 B29C66/81415 B29C66/81431 B29C66/81435 B29C65/48 B65B7/162 B65D41/24 B29L2031/7132 B29C66/8322 B29C66/73711 B29C66/73713 B29C66/73715 B29C66/24221 B29C66/24223 B29C66/24244 B29C66/24245 B29C66/24249 B29C66/71 B29C66/53461 B29C66/8161 B29C66/8242 B29C66/131 B29C66/135 B31B50/60 B31B2105/0022

European class: 64B23A2 B29C65/18 B29C65/48 B29C66/534 B31B1/60 B31B17/00 B65B7/16B B65B7/28F4 B65B7/28F5 B65D41/24 L31B201/60 L31B217/08A

US class: 206/497 229/125.35 53/14 53/32.9 53/329.2 53/329.3 53/341 53/412 53/42 53/488 53/557

Classification Explorer

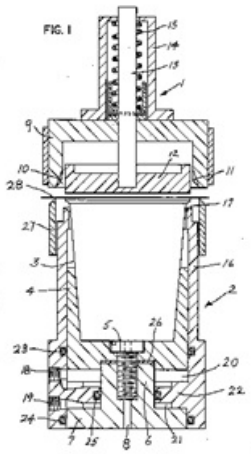
Cited documents: US3621637 A, US3449183 A, US3345798 A, US3224163 A, US3220908 A, US3200562 A, US3017729 A, US2613489 A,

Forward Citations: US9003746, US8875476, US7204069, US6739109, US6708748, US6637491, US6291037, US6058682, US5993942, US5946887, US5791120, US5784858, US5715967, US5577370, US5511360, US5371996, US5249410, US5230205, US5209795, US5032213, US4948441, US4833864, US4811550, US4121404, US4065908, US3902438, US3690091, US2012267036, US2011167762, US2006248860, US2005155324, US2004134913, US2003219515, ITMI20120963, FR2119887, DE2517837, DE2517837, CN102712372,

Abstract:
Source: US3628301A Method and apparatus for closuring a lipped **container** with a sheet of biaxially orientated thermoplastic by pushing down on portions of the sheet overlapping the lip of the **container** with a heating element which softens but does not heat-**seal** the sheet to the **container**, while at the same time clamping heat-softened overlapping portions tightly against the **container** to prevent them from shrinking. The pushed-down portions are then crimped under the lipped edge whereupon the portion of the sheet extending over the **open** top of the **container** is shrunk by heating to pull the crimped portions tightly underneath and against the lip. The **package** thus formed includes a sheet **closure** of biaxially orientatable thermoplastic, the **closure** having an outer biaxially orientated portion crimped tightly under the lip of a **container** without being heat-**sealed** thereto and an inner, taut, relatively unorientated portion extended over an **open** end of the **container**.

PatBase - US3628301_A

FIG. 1



INVENTOR.
ENGLE R. VERMEULEN
BY Michael J. Murphy
ATTORNEY

306) Family number: 32785878 (OA2403A)

Title:	SAC EN PELLICULE THERMOPLASTIQUE. THERMOPLASTIC FILM **BAG**. (Machine translation)
Priority:	OA19670052884 19670330

Family:

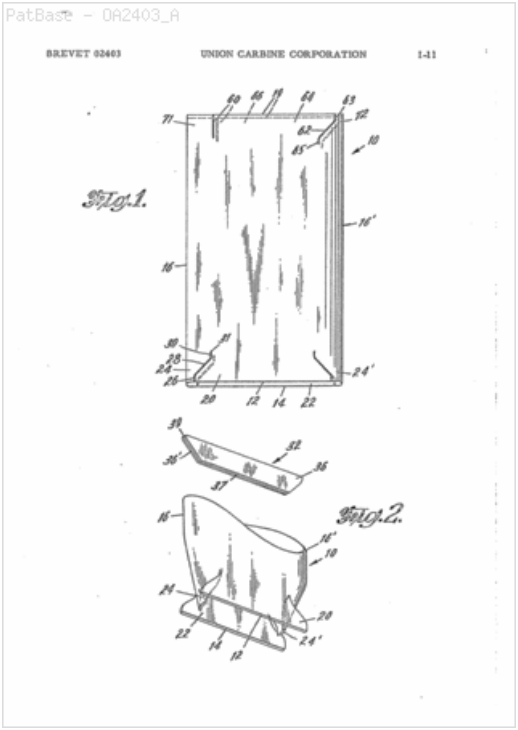
Publication number	Publication date	Application number	Application date
OA2403 A	19700505	OA19670052884	19670330

Probable Assignee:	UNION CARBIDE CORP
Assignee(s):(std):	UNION CARBIDE CORP
International class (IPC 8-9):	B31B29/00 B65D30/24 (Advanced/Invention); B31B29/00 B65D30/24 (Core/Invention)
International class (IPC 1-7):	B31B23/00 B31B23/64 B65D30/24
CPC:	B65D31/14 B31B2150/00 B31B2160/20
European class:	L31B221/20

Classification Explorer

Abstract:
Source: OA2403A [Source: Claim 1] *** **WARNING: OCR DATA – DESCRIPTION AND CLAIMS MAY OVERLAP** *** *** **Please email the Publication Number to Patbase@rws.com of any affected text for review** *** particulierement lorsqu'il s'agit de clinquants metalliques, et enfin des resistances ameliorees au flechissement, aux chocs et a la traction, comme par exemple avec les stratifies comprenant une couche de tissu de renforcement. L'invention prevoit egalement la possibilite de former des sacs a partir d'une serie de pellicules tubulaires individuelles assemblees concentriquement, ayant sensiblement la meme largeur a plat, par exem- ple plusieurs pellicules consistant en polymeres qui peuvent etre les memes ou differents. Les sacs formes a partir de telles pellicules a plusieurs couches offrent en general certains avantages, parmi lesquels des meilleures caracteristiques d'absorption d'energie et une meilleure resistance aux perforations et a l'abrasion, que les sacs formes d'une seule couche de pellicule ayant la meme epaisseur que les plusieurs couches du sac composite. Il va de soi qu'on peut apporter diverses modifications aux modes de realisation qui ont ete decrits sans sortir du cadre de l'invention. Ainsi par exemple on peut, le cas echeant, remplacer la pellicule tubulaire sans couture servant a former l'ebauche par un tube obtenu par scellement le long du bord longitudinal d'une feuille plate de pellicule thermoplastique. RESUME A - A titre de produit industriel nouveau, un sac en pellicule thermoplastique, caracterise par les points suivants, separement ou en combinaisons: 1 degrees) - Il presente une fermeture inferieure de forme rectangu- laire et thermiquement scellee, comprenant deux rabats terminaux replies vers l'interieur et scelles par la chaleur a deux rabats lateraux superposes dont la longueur est sensiblement egale a la largeur du sac et qui sont replies vers l'interieur sur les rabats terminaux, ces rabats lateraux etant thermiquement scelles ensemble suivant la ligne de recouvrement. 2 degrees) - Chaque rabat lateral presente des bords lateraux convergents vers l'interieur et chaque rabat terminal presente des bords lateraux convergents qui sont complementaires aux bords lateraux des rabats lateraux adjacents. 3 degrees) - Chacun des bords lateraux convergents vers l'interieur de chaque rabat lateral comprend une partie coupee en diagonale et se terminant aux deux extremites par une partie decoupee qui est parallele aux bords longitudinaux aplatis du sac. 4 degrees) - Le sac comprend une fermeture superieure scellee thermiquement qui comporte deux rabats terminaux plies vers l'interieur et une paire de rabats lateraux comportant des parties terminales pliees vers l'interieur se superposant mutuellement et recouvrant les rabats terminaux, un rabat terminal etant scelle a une partie intermediaire des rabats lateraux superposes et a une portion peripherique d'une extremite d'une manche tubulaire en pellicule thermoplastique, la partie peripherique restante de ladite extremite de cette manche etant scellee a la portion terminale de recouvrement adjacente des rabats lateraux, l'ouverture formee entre le rabat terminal et la portion terminale de recouvrement des rabats lateraux etant en communication avec l'interieur de cette manche tubulaire. 5 degrees) - Chaque rabat lateral presente un bord lateral parallele aux bords longitudinaux aplatis du sac et un bord lateral diagonalement espace du bord longitudinal aplati le plus proche du sac, un des rabats terminaux comprenant deux bords lateraux paralleles opposes qui cor- respondent a chaque bord lateral parallele des rabats lateraux, l'autre rabat terminal comportant deux bords lateraux diagonaux opposes qui correspondent a chaque bord diagonal des rabats lateraux. 6 degrees) - La manche tubulaire est thermiquement scellee au rabat terminal comprenant deux bords paralleles opposes et a la portion terminale des rabats lateraux ayant un bord lateral parallele aux bords longitudinaux aplatis du sac. B - Procede de fabrication d'un sac de pellicule thermo- plastique presentant une fermeture inferieure de forme rectangulaire, thermiquement scellee, selon le paragraphe A, ledit procede etant caracterise par les points suivants separement ou en combinaison; P) - Il consiste a decouper une ebauche de sac a partir d'un troncon de tube aplati de matiere thermoplastique; a fendre l'extremite inferieure de l'ebauche pour former une paire opposee de rabats lateraux identiques et une paire opposee de rabats terminaux identiques a intro- duire dans l'ebauche a travers son extremite superieure un mandrin muni de deux plaques de forme trapezoidale, articulees ensemble et aplaties l'une sur l'autre; a mettre en alignement les cotes paralleles superieurs, libres et plus courts de ces plaques trapezoidales avec les extremites interieures des fentes de l'extremite inferieure; a serrer l'ebauche du sac avec le mandrin qu'elle contient entre les surfaces verti- cales de deux organes de serrage; a ouvrir les plaques a une position paralleles a la surface horizontale des organes de serrage, en obligeant ainsi la paire opposee des rabats terminaux a se replier vers l'interieur sur la surface hexagonale, a ce stade plane, des plaques ouvertes; a replier vers l'interieur sur ladite surface et sur les rabats terminaux plies la paire opposee de rabats lateraux avec recouvrement mutuel; a sceller thermiquement les rabats replies vers l'interieur tout en les supportant sur la surface plane; a replier les plaques pour les retablir dans la position aplatie initiale; et a enlever le mandrin du sac ainsi ferme. 2 degrees) - Pour realiser la fermeture superieure thermiquement scellee du sac, on entaille l'extremite superieure du sac aplati pour former deux rabats lateraux identiques ayant un bord lateral parallele aux bords longitudinaux aplatis du sac et un bord lateral s'ecartant en diagonale du plus proche bord longitudinal du sac et deux rabats termi- naux, le premier de ces rabats ayant des bords lateraux mutuellement paralleles et le second presentant des bords lateraux convergents comple- mentaires aux bords lateraux des rabats lateraux adjacents; on serre la partie superieure du sac aplati entre deux organes de serrage; on tire les rabats lateraux vers l'exterieur pour les ecarter l'un de l'autre dans un plan perpendiculaire a l'axe longitudinal du sac serre et on tire les rabats terminaux vers l'interieur suivant la largeur du sac en aplatissant ces rabats terminaux dans le meme plan que les rabats lateraux et sur la surface exterieure de ces derniers; on introduit une feuille de pelli- cule thermoplastique entre le rabat terminal ayant des bords lateraux paralleles et la partie correspondante de la surface exterieure des rabats lateraux, ladite feuille s'etendant jusqu'aux bords exterieurs des rabats lateraux et sur une certaine distance de la largeur des rabats lateraux; on scelle a chaud cette feuille a la surface interieure du rabat terminal et a la surface exterieure des rabats lateraux; on plie vers l'interieur les portions terminales des rabats lateraux et la portion de la feuille scellee a ces rabats, avec superposition des rabats terminaux; on scelle a chaud le rabat terminal ayant les bords lateraux evases avec les rabats lateraux adjacents de superposition; et on scelle a chaud les rabats superposes l'un a l'autre et la partie adjacente de la feuille repliee avec eux. CABINET de Mme MONGO MBOCK [Source: Claim 1] *** **WARNING: OCR DATA - DESCRIPTION AND CLAIMS MAY OVERLAP** *** *** **Please email the Publication Number to Patbase@rws.com of affected Any text for review** *** Particularly when it comes to metal foils, and finally enhanced resistances to bending, impact and tensile strength, such as with laminates comprising a reinforcing fabric layer. The invention also provides for the possibility of forming **bags** from a series of individual tubular assemblies concentrically films having substantially the same width a dish, for example several films consisting of polymers that can be the same or different. **Bags** forms from such films has several layers generally offer some advantages, including the best energy absorption characteristics and better resistance to punctures and abrasion, the **bags** form a single layer film having the same thickness as the several layers of the composite **bag**. Of course, we can make various modifications to the embodiments which have been described within the scope of the invention. For example one can, if necessary, replace the tube seamless film used to form the roughing of a tube obtained by **sealing** along the longitudinal edge of a flat sheet of thermoplastic film. SUMMARY A - As a new industrial product, a **bag** of thermoplastic film, characterized by the following, separately or in combination: 1 degrees) - It presents a lower closing rectangular shape and thermally **sealed** with two end flaps replies inwards and heat **sealed** lateral two superposed flaps having a length substantially equal to the width of the **bag** and are folded inwardly on the end flaps, these lateral flaps being heat **sealed** together along the recovery line. 2 degrees) - Each lateral flap presents convergent lateral edges inwards and each end flap presents convergent lateral edges that are complementary to the lateral edges of adjacent lateral flaps. 3 degrees) - Each of the lateral edges converging towards the interior of each lateral flap includes

a cut portion diagonally and ending at both ends by a cut portion which is parallel to the longitudinal edges of the flattened **bag**. 4 degrees) - The **bag** comprises an upper heat **sealed** **closure** which comprises two end flaps folded inwards and a pair of side flaps having end portions bent inwardly overlapping and mutually overlapping the end flaps, one end flap being **sealed** to an intermediate portion of the lateral flaps bunk and has a peripheral portion of one end of a tubular sleeve of thermoplastic film, the remaining peripheral portion of said end of said sleeve being **sealed** to the adjacent end portion **covering** the side flaps, the **opening** formed between the terminal and the terminal portion flap **covering** the lateral flaps being in communication with the interior of the tubular sleeve. 5 degrees) - Each side flap has a lateral edge parallel to the longitudinal edges of the flattened **bag** and a lateral edge of the flattened space diagonally longitudinal edge closest to the **bag**, one of the end flaps comprising two lateral edges parallel opposing that correspond to each parallel lateral edge of the lateral flaps, the other end flap having two lateral edges diagonal opposites that match each diagonal edge of the lateral flaps. 6 degrees) - The tubular sleeve is heat **sealed** to the end flap comprising two parallel opposed edges and the tips of lateral flaps having a lateral edge parallel to the longitudinal edges of the flat **bag**.B - Method of manufacturing a thermoplastic film **bag** presenting a lower closing rectangular heat-**sealed** under subsection A, said method characterized by the following points separately or in combination; P) - There is a cut out of a **bag** roughing from a flattened tube section of thermoplastic material; has split the lower extremity of the roughing to form an opposed pair of identical lateral flaps and an opposed pair of identical end flaps to introduce in roughing through its upper end a mandrel with two plates of trapezoidal shape, hinged together and flattened one over the other; has set the parallel alignment superiors odds, free and shorter trapezoidal these plates with the ends inland slots of the lower end; a roughing tighten the **bag** with the mandrel it contains vertical wedges between the surfaces of two clamping members; to **open** the plates has a parallel position to the horizontal surface of the clamping members, thereby forcing the opposing pair of end flaps has to fold inwards on the hexagonal surface is flat this stage, **open** plates; a fold inwards on said surface and on the end flaps folded the opposite pair of lateral flaps with mutual overlap; was heat **seal** the flaps folded inwardly while supporting on the flat surface; a fold plates to restore the flattened in the initial position; and remove the chuck and the **bag** closes. 2 degrees) - To achieve the thermally **SEALED** upper **closure** of the **bag** is notched the upper extremity of the flattened **bag** to form two lateral flaps identical having a lateral edge parallel to the longitudinal edges of the flattened **bag** and a lateral edge away diagonally from nearest longitudinal edge of the **bag** and two terminals flaps, the first of these flaps having mutually parallel side edges and the second presenting converging lateral edges complementary to the lateral edges of adjacent side flaps; is tightened the upper part of the flattened **bag** between two clamping members; the side flaps to the outside is pulled to separate them from one another in a plane perpendicular to the longitudinal axis of the holding **bag** and pulling the end flaps inwards along the width of the **bag** by flattening these flaps terminals in the same plane as the side flaps and on the outer surface thereof; introducing a sheet of thermoplastic pelli- flop between the end flap having edges parallel side and the corresponding part of the outer surface of the lateral flaps, said sheet extending to the outer edges of the side flaps and on a distance from the width of the lateral flaps; **sealed** hot in this sheet has the inner surface of the end flap and the outer surface of the lateral flaps; is folded inwards the end portions of the lateral flaps and the portion of the **sealed** sheet has these flaps with superimposed end flaps; **sealed** the hot end flap having flared lateral edges with adjacent lateral flaps overlay; hot and has **sealed** the flaps superposed one to another and the adjacent portion of the folded sheet with them. CABINET Ms Mongo MBOCK



307) Family number: 911821 (US3513629A)

© PatBase

Title:	OVERWRAP PACKING MACHINES
Priority:	US19670695543 19671208

Family:

Publication number	Publication date	Application number	Application date
US3513629 A	19700526	US19670695543	19671208

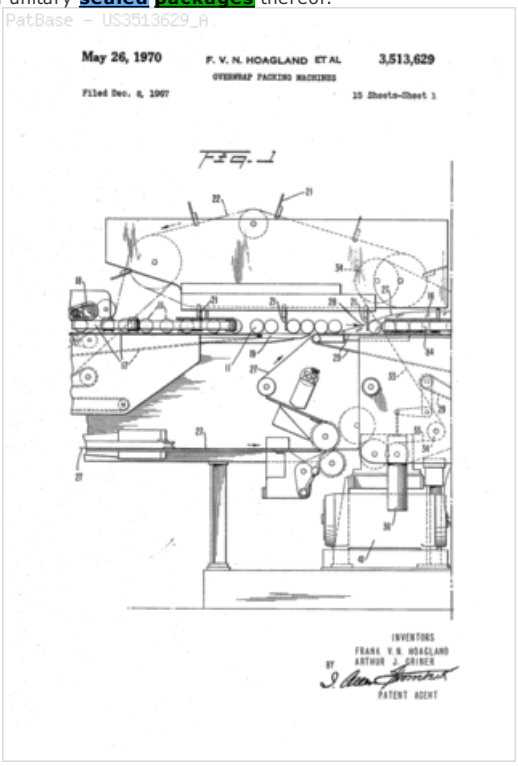
Probable Assignee:	NAT BISCUIT CO
Assignee(s):(std):	NAT BISCUIT CO
Assignee(s):	NATIONAL BISCUIT CO
Inventor(s):(std):	HOAGLAND FRANK V N ; GRINER ARTHUR J
Inventor(s):	ARTHUR J GRINER ; FRANK V N HOAGLAND ; FRANK VN HOAGLAND
International class (IPC 8-9):	B65B9/06 (Advanced/Invention); B65B9/06 (Core/Invention)
International class (IPC 1-7):	B65B51/30 B65B9/06
CPC:	B65B9/06
European class:	B65B9/06
US class:	53/182 53/531 53/550

Classification Explorer

Cited documents:	US3417544 A, US3353327 A, US3325966 A, US3303630 A, US2747346 A, GB928606 A,
Forward Citations:	US7891156, US6698166, US6393809, US6381919, US6315275, US6029957, US6006892, US5584166, US5400574, US5165221, US5072575, US5070679, US4967541, US4955184, US4722168, US4559764, US4341057, US4219988, US4106265, US4102111, US4041677, US3738081, US3657856, US2010242410, US2005235609, NL1006462, LT3212, FR2750683, FR2648783, ES2146516, EP0030348, DE19728586, BE1006030,

Abstract:

Source: US3513629A ABSTRACT OF THE DISCLOSURE
Unitary apparatus for continuous formation of a transparent film overwrap about advancing groups of pre-wrapped stacks of cookies. The apparatus comprises an infeed conveyor carrying spaced prewrapped stacks of cookies, a pusher device for accumulating predetermined numbers of individual prewrapped stacks of cookies, a wrapper forming device for shaping the overwrap film about the advancing spaced groups of cookies, a heat **seal**-ing **unit** for **sealing** the marginal free edges of the wrapper film to form a **sealed** longitudinal seam thereon, and a transverse **sealing** and severing mechanism operating in synchronisai with the advancing spaced groups of stacked cookies to form unitary **sealed** **packages** thereof.



308) Family number: 110495 (US3603943A)

Title: PNEUMATIC RECORD PROCESSING SYSTEM

Priority: US19690790710 19690113 US19690837796 19690630

Family:

Publication number	Publication date	Application number	Application date
AT295889 B	19720125	AT19700000203	19700109
BE743847 A	19700528		19691230
BE750949 A	19701103		00000000
BE750949 A1	19701103	BE19700750949	19700526
BR7015993 A0	19730531	BR19700215993	19700113
CA951344 A1	19740716	CA19690069791	19691215
CH513485 A	19710930	CH19700000375	19700113
DE2000867 A1	19700820	DE19702000867	19700109
DE2000867 B2	19710729	DE19702000867	19700109
DE2028955 A1	19710121	DE19702028955	19700612
DE2028955 B2	19720831	DE19702028955	19700612
DE2028955 C3	19730419	DE19702028955	19700612
ES374640 A1	19720101	ES19690374640	19691217
FR2028178 A1	19701009	FR19690042825	19691211
FR2028178 A5	19701009	FR19690042825	19691211
FR2050973 A5	19710402	FR19700017713	19700515
GB1250697 A	19711020		19700107
JP51015410 B4	19760517	JP19700046976	19700602
NL6919528 A	19700715	NL19690019528	19691230
SE363182 B	19740107	SE19700000291	19700112
US3576282 A	19710427		19690630
US3603943 A	19710907	US19690790710	19690113

Probable Assignee: IBM

Assignee(s):(std)**:** D H KNOPPKE ; IBM

Assignee(s): IBM CORP ; INT BUSINESS MACHINES CORP ; IBM US ; INT BUSINESS MACHINES CORP ARMONK 10 504 NEW YORK E U A ; INT BUSINESS MACHINES CORP ARMONK N Y V ST A ; NEJEZCHLEB VLADIMIR ; BADUM PAUL J

Inventor(s):(std)**:** BADUM P ; BADUM PAUL J ; EPINA A P ; EPINA AUGUST P JR ; EPINA JUN AUGUST PETER ; JOHN BADUM PAUL ; NEJEZCHLEB V ; PAUL JOHN BADUM ; SMITH S H ; SMITH SIDNEY H ; SMITH SIDNEY HENRY ; NEJEZCHLEB VLADIMIR ; NIJEZCHLEB V ; VLADIMIR NEJEZCHLEB ; BADUM P J

Inventor(s): PAUL J BADUM ; SMITH SIDNEY HENRY BROOMFIELD ; V NEJEZCHLEB ; S H SMITH ; SH SMITH ; SIDNEY H SMITH ; NEJEZCHLEB V US ; EPINA JUN ; BOULDER ; COL ; BADUM P J US ; A P EPINA ; AP EPINA ; AUGUST P EPINA JR

International class (IPC 8-9): B65H23/18 B65H23/188 G06K13/26 G11B15/38 G11B15/58 G11B15/665 G11B15/67 (Advanced/Invention);
B65H23/18 B65H23/188 G06K13/00 G11B15/00 G11B15/18 G11B15/66 G11B15/665 (Core/Invention)

International class (IPC 1-7): G06K13/00 G06K13/18 G11B15/00 G11B15/02 G11B15/28 G11B15/38 G11B15/56 G11B15/58 G11B15/66 G11B23/12 G11B25/06

CPC: G11B15/58 G11B15/665

European class: G11B15/58 G11B15/665

US class: 226/118.5 226/7 226/95 226/97.2 360/93 G9B/15.075 G9B/15.085

Classification Explorer

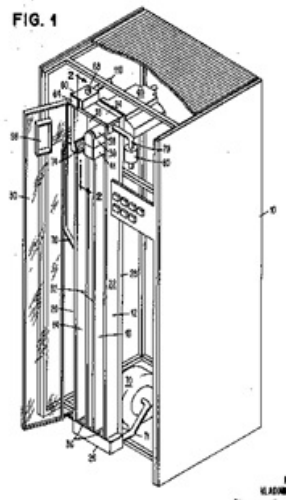
Cited documents: US3525087 A, US3512692 A, US3386772 A, US3384317 A, US3378826 A, US3314729 A, US3202373 A, US3184131 A, US3091409 A, US2980355 A, JP42020113 A2, FR1382113 A,

Forward Citations: US5485325, US5432653, US3720794,

Abstract:
Source: GB1250697A 1,250,697. Record/playback apparatus. INTERNATIONAL BUSINESS MACHINES CORP. 7 Jan., 1970 [13 Jan., 1969], No. 761/70. Heading G5R. A record/playback apparatus handles a web stored in a single-reel **container** with one end attached to the reel and the other to the **container**, and includes means to withdraw a length of web from the **container**, drive it past a transducer and return it to the **container**. The **container** is preferably that of Specification 1,250,696 in which one end of the web is secured to the hinged lid 50 such that when the **container** is loaded through a retaining door 64 into a compartment 60 and a solenoid 68 is operated a catch is released to allow the lid to spring **open** and automatically unwind a short length of the web. Vacuum is applied to columns 14 and 16 to withdraw the web as far as a neck in column 14 where a port 76 is situated to clamp the web and thereby cause the remainder to feed into column 16 where it is vacuum-clamped by port 79. A bidirectional capstan 38 feeds the web past a 4-track write and check-read head 41 indexable to 16 positions, and is controlled by photo-sensors (Fig. 9, not shown) detecting transparent portions in the web. After use, the vacuum is shut off and a solenoid 114 operated to extend the shaft 112 of rewind motor 110 into the **container** to engage clutch plates 116, 58 and return the web to the **container**, the web automatically closing the lid to reduce contamination. In a modification, the recording surface of the web is internal and the head is movable into and out of the columns to allow loading of the web.

PatBase - US3603943_A

FIG. 1



INVENTORS
PAUL J. RADOM
VLADIMIR WEJTCHLER
BY
ATTORNEY

309) Family number: 112790 (US3728839A)

Title: **STORAGE** STABLE SURGICALLY ABSORBABLE POLYGLYCOLIC ACID PRODUCTS

Priority: US19690788501 19690102 US19710138425 19710429 US19730345604 19730328 US19730345633 19730328

Family:

Publication number	Publication date	Application number	Application date
BE752755 A	19701230		00000000
BE752755 A1	19701230	BE19700752755	19700630
NL165057 B	19801015	NL19690017729	19691125
NL165057 C	19810316	NL19690017729	19691125
NL6917729 A	19700706	NL19690017729	19691125
US3728839 A	19730424	US19710138425	19710429
US3815315 A	19740611	US19730345604	19730328
US4135622 A	19790123	US19760744365	19761123

Probable Assignee: AMERICAN CYANAMID CO

Assignee(s):(std)**:** AMERICAN CYANAMID CO

Assignee(s): AMERICAN CYANAMID CO US ; AMERICAN CYANAMID COMPANY ; AMERICAN CYANAMID COMPANY WAYNE NEW JERSEY VER ST ; AMERICAN CYANAMID COMPANY WAYNE NEW JERSEY VER ST V AM ; AMERICAN CYANAMID CY WAYNE NEW JERSEY E U A ; AMERICAN CYANAMID CY WAYNE NEW JERSEY EUA

Inventor(s):(std)**:** CLICK A ; GLICK A ; GLICK ARTHUR

Inventor(s): A CLICK ; GLICK A US

International class (IPC 8-9): A61B17/06 A61L17/12 A61L2/20 B32B15/08 B65D75/26 (Advanced/Invention); A61B17/06 A61L17/00 A61L2/20 B32B15/08 B65D75/26 (Core/Invention)

International class (IPC 1-7): A61L13/00 A61L17/00 A61L17/02 A61L5/00 B32B15/12 B65B55/10

CPC: B32B15/08 A61L17/12 B32B15/085 A61B17/06133 A61L2/206 B32B15/20 B32B27/10 B32B27/32 B32B2323/046 B32B2439/00 B65D75/26

European class: A61B17/06P4 A61L17/12 A61L2/20E B32B15/08 B65D75/26

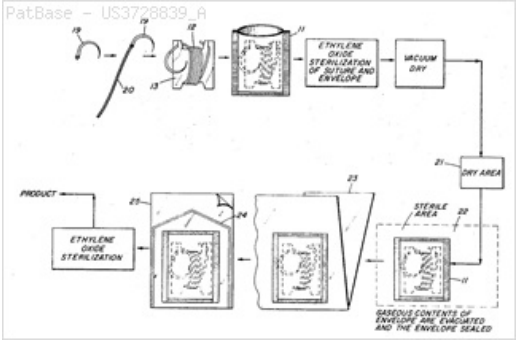
US class: 206/210 206/484 206/524.8 206/63.3 229/5.82 422/34 53/425 53/434 53/440 53/449

Classification Explorer

Cited documents: US3728839 A, US3613879 A, US3297033 A, US3256981 A, US3152694 A, US3043067 A,

Forward Citations: WO9503837, WO9317915, WO8603976, WO13152271, WO13123206, WO11008547, WO07049076, WO06082060, WO06082060, WO05051457, WO05051457, WO04050127, WO0198176, WO0187392, WO0037336, USRE36132, USRE36071, US9597072, US9597067, US9539080, US9474524, US9414893, US9386772, US9382023, US9149273, US9096368, US9044531, US8980299, US8973748, US8960422, US8790684, US8758669, US8746445, US8679404, US8668867, US8540072, US8458951, US8297439, US8225927, US8156718, US8133437, US8128859, US8112973, US7964136, US7875063, US7828150, US7762044, US7637369, US7540998, US7337592, US7040485, US6996952, US6945985, US6915623, US6905016, US6866142, US6679374, US6494314, US6440364, US6390291, US6352152, US6321909, US6315112, US6260699, US6207271, US6179118, US6138440, US6095323, US6073759, US5919473, US5868244, US5795584, US5765740, US5715943, US5683795, US5623810, US5584164, US5472702, US5468252, US5464580, US5462162, US5461844, US5417036, US5393594, US5392590, US5366081, US5359831, US5322161, US5306289, US5261210, US5257692, US5241803, US5226912, US5222978, US5220769, US5217772, US5178277, US5154283, US5135715, US5119616, US5111641, US5111640, US5097956, US5082636, US5051272, US5037429, US5031762, US5014494, US4998400, US4911178, US4863016, US4813210, US4782954, US4754595, US4727706, US4714595, US4709819, US4644586, US4603538, US4587793, US4549649, US4523679, US4522302, US4496446, US4491218, US4401218, US4287171, US4258843, US4236633, US4177620, US4135622, US4021283, US4014433, US3877570, US3869044, US2016355677, US2014346072, US2013299380, US2012187002, US2012181193, US2012131844, US2011297570, US2011214398, US2011203227, US2011114519, US2010323641, US2010314805, US2010264050, US2010163435, US2010078336, US2009320408, US2009301033, US2009205987, US2009171388, US2009148492, US2009074610, US2008161851, US2007256945, US2006260967, US2006249419, US2006226031, US2006091034, US2006032763, US2006000191, US2005191207, US2005067312, US2005034431, US2004111116, US2004089561, US2004063607, US2003209453, US2003158512, US2003140923, US2002168401, JP60012068, GB2387587, EP2584996, EP2415406, EP2363155, EP2113205, EP2108318, EP1987781, EP1567065, EP1040840, EP1004508, EP0919204, EP0834324, EP0834324, EP0685399, EP0612504, EP0494081, EP0471441, EP0248639, EP0248639, EP0182553, EP0142378, EP0142378, EP0050215, EP0046518, DE102005006718, AU773328, AU749427, AU670661, AU2004206989, AU2003293072,

Abstract:
Source: US3728839A A dry absorbable synthetic surgical element of a polymer subject to hydrolytic degradation to non-toxic, tissue-compatible, absorbable components, such as a polyglycolic acid suture, is **package** in an air-tight **sealed container** which is substantially impervious to water vapor such as a laminate film having a metallic foil layer. The gaseous contents of the envelope are, prior to **sealing** the suture within the envelope, either evacuated or replaced with a gas which is inert towards said surgical element and which is substantially free from water. The water content should be below 0.5 percent by weight of the weight of the surgical element, and preferably is below 0.05 percent by weight. Polyglycolic acid sutures and other elements thus **packaged** retain acceptable levels of strength for at least one year at **storage** temperatures of 72 DEG F. and ambient humidity outside the **package**. The contents may be sterilized by using ethylene oxide.



310) Family number: 659434 (US3587412A)

Title:	CARDBOARD **BOX** AND METHOD OF MAKING SAME
Priority:	US19680772215 19681031

Family:

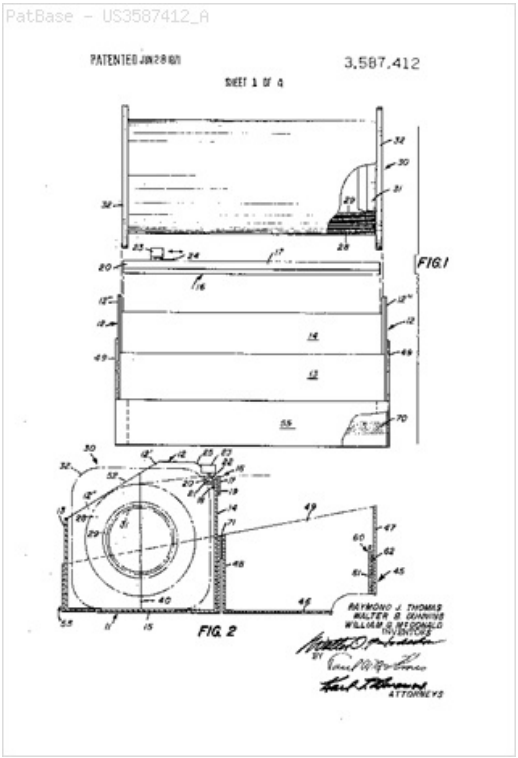
Publication number	Publication date	Application number	Application date
FR2021995 A1	19700724	FR19690036511	19691024
GB1292627 A	19721011	GB19690053252	19691030
US3587412 A	19710628	US19680772215	19681031

Probable Assignee:	EASTMAN KODAK CO
Assignee(s):(std)**:**	EASTMAN KODAK CO
Assignee(s):	EASTMAN KODAK COMPANY ; EASTMAN KODAK CY
Inventor(s):(std)**:**	THOMAS RAYMOND J ; DUNNING WALTER B ; MCDONALD WILLIAM G ; THOMAS RAYMOND JOSEPH ; MCDONALD WILLIAM GEORGE ; DUNNING WALTER BENJAMIN
Inventor(s):	RAYMOND JOSEPH THOMAS ; RAYMOND J THOMAS ; WALTER B DUNNING ; WILLIAM G MCDONALD ; WILLIAM GEORGE MCDONALD ; WALTER BENJAMIN DUNNING
International class (IPC 8-9):	B65D85/672 (Advanced/Invention); B65D85/67 (Core/Invention)
International class (IPC 1-7):	B31B1/62 B31B1/72 B31B9/14 B65D5/66 B65D5/70 B65D83/00 B65D85/00
CPC:	Y10S493/901 B65D85/672
European class:	B65D85/672
US class:	493/115 493/59 493/84 493/901 93/39

Classification Explorer

Forward Citations:	USD700837, US7603937, US2007000935, FR2914287, FR2327899, FR2327899, DE202006004421,

Abstract:
Source: GB1292627A 1292627 Storing photo-sensitive materials EASTMAN KODAK CO 30 Oct 1969 [31 Oct 1968] 53252/69 Heading G2C [Also in Division B8] A **box** for receiving, storing and **dispensing** from a roll 28 of light-sensitive material has an **open** top base 11 having a bottom wall 15, two opposite end-walls 12, a front wall 13 and a back wall 14, a lid 45 having corresponding walls and being hinged to the back wall of the base along a line intermediate the top and bottom edges thereof to make a light tight **closure** with the base and capable of being repeatedly raised and lowered for **opening** and closing the **box** without destroying the light-tightness of the **closure**, and a cutter guide 16 across which a length of the material can be drawn from the roll only when the **box** is **open** and which extends transversely of and wider than the roll for guiding a cutter 23 laterally across the material to sever a length of material from the roll. The roll is wound upon an openended cylindrical core 29 and is rotatably supported upon a pair of core plugs 31 having rectangular flanges 32. The **box** is made from three prescored blanks of **box** board, one blank forming the base 11 having single thickness front, back and bottom walls 13, 14, 15 and double thickness end-walls 12, another blank forming the lid having single thickness walls and a third blank 55 of heavy boxboard which is wrapped around the bottom of the base so that the closed **box** has a flush finish. A boxboard attachment 60 fixed inside the lid co-operates with the top surface of front wall 13 to form a light lock. In an alternative method of making the **box**, the lid 45 and band 55 are made as one **open**-bottom **box** and after cementing to the base only at lower portions of the overlapping regions is cut along three sides above the cemented portions e.g. in a specially designed jig, to form the lid portion the fourth side having a preformed hinge line.



311) Family number: 18289705 (US3696961A)

Title: PROTECTIVE EDGE FOR EASY **OPENING** **CONTAINER**

Priority: US19690815043 19690410 US19700082260 19701020 US19700822607 19701020 US19720249326 19720501

Family:

Publication number	Publication date	Application number	Application date
AT298326 B	19720510	AT19690010097	19691027
AU197133204 A1	19730315	AU19710033204	19710907
AU467893 B2	19751218	AU19710033204	19710907
BE748304 A	19700916		00000000
BE748304 A2	19700916	BE19700748304	19700401
BE774207 A	19711112	BE19710774207	19711020
CA940384 A1	19740122	CA19690058467	19690731
CA958664 A1	19741203	CA19710111129	19710422
DE1953335 A1	19701015	DE19691953335	19691023
DE2114156 A1	19720427	DE19712114156	19710324
DE2114156 B2	19790222	DE19712114156	19710324
DK127043 B	19730917	DK19700001779	19700409
ES185879 U	19731016	ES19700185879U	19700410
ES185879 Y	19740816	ES19700185879U	19700410
FR2038358 A1	19710108	FR19700001375	19700115
FR2038358 B1	19740712	FR19700001375	19700115
FR2112318 A1	19720616	FR19710016340	19710506
FR2112318 B1	19760723	FR19710016340	19710506
GB1267902 A	19720322	GB19700014570	19700325
GB1300340 A	19721220	GB19710048654	19711019
JP1061719 C3	19810831	JP19760037017	19760402
JP48023312 B4	19730712	JP19700030483	19700409
JP52101191 A2	19770824	JP19760037017	19760402
JP53043349 B4	19781118	JP19710082038	19711016
JP56003255 B4	19810123	JP19760037017	19760402
NL7004104 A	19701013	NL19700004104	19700323
NL7114398 A	19720424	NL19710014398	19711020
SE360030 B	19730917	SE19700004715	19700407
US3696961 A	19721010	US19700082260	19701020
US3848557 A	19741119	US19720249326	19720501
ZA6905279 A	19710331	ZA19690005279	19690723
ZA7100057 A	19720830	ZA19710000057	19710105

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std)**:** CONTINENTAL CAN CO ; CONTINENTAL CAN CO INC ; CONTINENTAL CAN CO INC US ; CONTINENTAL CAN COMPANY INC ; CONTINENTAL CAN CY INC NV ; CONTINENTAL GROUP ; N V CONTINENTAL CAN CY INC NEW YORK V S A

Assignee(s): THE CONTINENTAL GROUP INC NEW YORK N Y V ST A ; CONTINENTAL CAN CY INC ; CONTINENTAL GROUP INC NEW YORK N Y V ST A ; CONTINENTAL CAN CY IN US ; CONTINENTAL CAN CY INC TE NEW YORK V S A ; HOLK ALBERT J ; CONTINENTAL GROUP INC

Inventor(s):(std)**:** HOLK ALBERT J ; HOLK A US ; HOLK A J US ; ARUBAATO JIEE HOOKU JIYUNIA ; ALBERT J HOLK JR ; AJ HOLK ; HOLK A ; HOLK A J ; HOLK ALBERT J JR ; J HOLK JUN ALBERT ; HOLK JUN ALBERT J

Inventor(s): A J HOLK ; ALBERT JOHN HOLK JR ; HOLK JUN ALBERT J FRANKFORT ILL V ST A ; J HOLK JUN ; HOLK JUN

International class (IPC 8-9): B21D51/38 B21D51/44 B65D17/40 B65D8/20 F16G15/04 (Advanced/Invention); B21D51/38 B65D17/28 B65D8/04 F16G15/00 (Core/Invention)

International class (IPC 1-7): B21D51/00 B21D51/26 B21D51/38 B21D51/40 B21D51/44 B65D17/00 B65D17/02 B65D17/08 B65D17/16 B65D17/18 B65D17/20 B65D17/24 B65D17/28 B65D75/06 B65D8/20 F16G15/04

CPC: Y10S220/906 B65D17/4011 B21D51/383

European class: B21D51/38B B65D17/16B1

US class: 113/12.1C 220/269 220/54 220/712 220/90.6 220/906 413/13

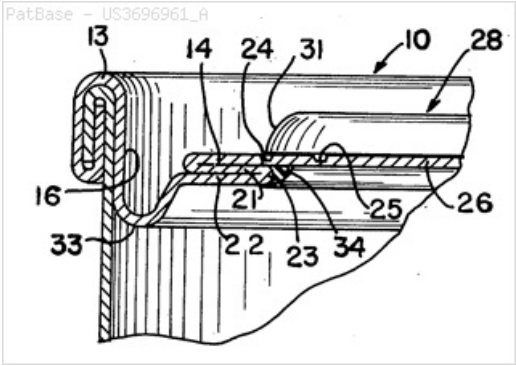
Classification Explorer

Cited documents: US3705563 A, US3698590 A, US3696961 A, US3527377 A, US3525455 A, US3447713 A, US3434623 A, US3303958 A, US3142412 A, US3055539 A, US2017460 A, JPS4823312, JP48023312 A2,

Forward Citations: WO9419246, WO9419246, WO8805407, WO8805406, WO8805405, US7344041, US7225944, US7143623, US7107810, US7036348, US6421894, US6386813, US6234337, US5950858, US5145086, US5038956, US4848623, US4455114, US4116361, US4116360, US4052949, US4044916, US4016311, US3993010, US3990376, US3986632, US3968899, US3949692, US3946683, US3945334, US3939787, US3905514, US3871314, US3868919, US3853080, US3848557, US3838788, US3837524, US3819083, US3794206, US3765352, US2007138181, US2006237459, US2006042982, US2005077294, US2005044921, US2005044920, US2004031798, JP57016204, JP2014200176, GB2275248, FR2337668, FR2335409, FR2327151, FR2203686, FR2192946, FR2173882, EP0158711, EP0158711, DE2655019, DE2554264, DE2532194, DE2404022, DE2257580, AU667315,

Abstract:
Source: US3696961A An easy **opening** **container** in which the end **closure** is formed with annular fold bands. A weakening line to define a removable panel portion is formed in the central panel slightly outboard of the folded smooth edge of the annular fold bands so that the folded edge protects the user from the sharp edges after removal of the removable panel portion.

PatBase - US3696961_A



312) Family number: 718655 (GB1205892A)

© PatBase

Title:	COLLAPSIBLE **CONTAINER**
Priority:	GB19680005285 19680201

Family:

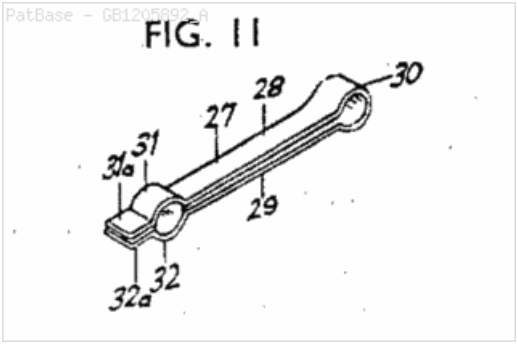
Publication number	Publication date	Application number	Application date
GB1205892 A	19700923	GB19680005285	19680201

Probable Assignee:	DEV CONSULTANTS INC
Assignee(s):(std):	DEV CONSULTANTS INC
Assignee(s):	DEVELOPMENT CONSULTANTS INC
Inventor(s):(std):	DICKEY JOHN W
Inventor(s):	JOHN W DICKEY
International class (IPC 8-9):	B65D21/08 B65D33/16 B65D37/00 (Advanced/Invention); B65D21/00 B65D33/16 B65D37/00 (Core/Invention)
International class (IPC 1-7):	B65D5/36 B65D88/16
CPC:	B65D21/08 B65D33/1675 B65D37/00
European class:	B65D21/08 B65D33/16F2 B65D37/00

Classification Explorer

Forward Citations: GB2273734, GB2210018, GB2120532, FR2886273, DE8911558,

Abstract:
Source: GB1205892A 1,205,892. Clips. DEVELOPMENT CONSULTANTS Inc.,1 Feb., 1968, No.5285/68. Heading E2B. [Also in Division B8] A resilient spring clip 27, for closing a **container** spout, (see Division B8), comprises spring arms 28,,29. The clip 27 may be provided with **tabs** 31a, 32b which may be permanently joined e.g. by welding or heat **sealing**. A modification, comprises an elongated cap (36), Fig. 14 (not shown), with a longitudinal slot (37) to receive a **container** spout. One side of the slot may bow inwardly. In a further modification, the cap is elongated and U-shaped with one side bowed (39), Fig. 15 (not shown), and another side flared, to receive the spout.



313) Family number: 1285659 (US3698979A)

Title: METHOD OF PRODUCING LAMINATED FILM FOR **PACKAGING** USE

Priority: CA19670002467 19671013 CA19690048940 19690417 US19720235291 19720316 US19700048929 19700619 US19670612964 19670131

Family:

Publication number	Publication date	Application number	Application date
CA919604 A1	19730123		00000000
CA919604 A2	19730123	CA19690048940	19690417
DE1694657 A1	19710701	DE19671694657	19671228
GB1207971 A	19701007	GB19670046097	19671009
US3698979 A	19721017	US19700048929	19700619
US4273815 A	19810616	US19720235291	19720316

Probable Assignee: KRAFT FOODS INC

Assignee(s):(std)**:** MAYER AND CO INC O ; OSCAR MAYER AND CO

Assignee(s): OSCAR MAYER AND CO INC ; PAUL E GRINDROD ; OSCAR E SEIFERTH ; KRAFT FOODS INC ; MAURICE J GIFFORD

Inventor(s):(std)**:** EDWARD GRINDROD PAUL ; EUGENE SEIFERTH OSCAR ; GIFFORD M J ; GIFFORD MAURICE J ; GRINDROD P E ; GRINDROD PAUL E ; JENNINGS GIFFORD MAURICE ; SEIFERTH O E ; SEIFERTH OSCAR E

Inventor(s): MAURICE J GIFFORD ; OSCAR E SEIFERTH ; PAUL E GRINDROD

International class (IPC 8-9): B32B27/00 B65B9/02 B65D75/32 (Advanced/Invention); B32B27/00 B65B9/00 B65D75/28 (Core/Invention)

International class (IPC 1-7): B29D9/00 B32B27/08 B32B27/10 B65B9/02 C08J1/40

CPC: B65D75/32 Y10T156/103 Y10T156/1031 Y10T428/31906 Y10T428/31928 Y10T428/31935 B32B27/08 B32B1/00 B32B27/304 B32B27/36 B32B37/203 B32B2439/70 B65B9/02 B32B3/04 B32B27/00 B32B2250/03 B32B2553/00

European class: B32B27/00 B65B9/02 B65D75/32

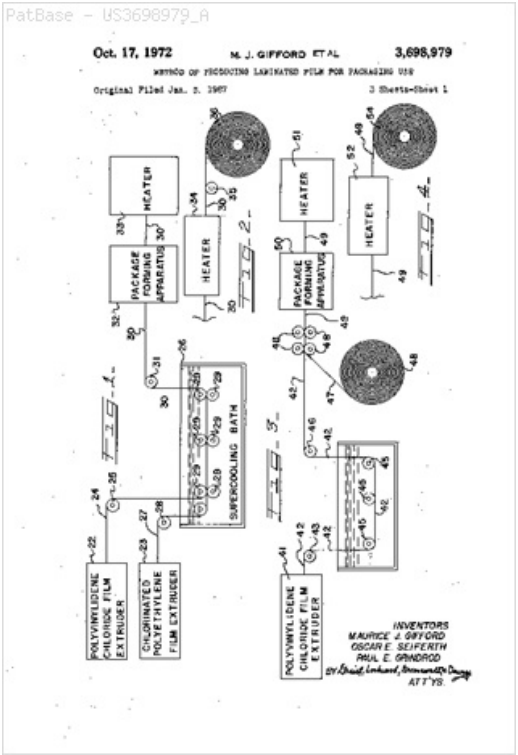
US class: 156/213 156/214 156/243 156/244 156/244.12 156/244.23 156/244.24 156/306.3 156/311 229/80 264/173.13 383/116 383/99 426/106 426/127 426/129 428/35 428/514 428/520 428/522 53/427 53/477

Classification Explorer

Cited documents: US3647485 A, US3560227 A, US3137580 A, US3083106 A,

Forward Citations: WO9116870, USD459222, USD445311, USB237953, US9708104, US9688442, US9663282, US9656783, US9630761, US9586121, US9221590, US9205967, US9187228, US9150342, US8951591, US8889205, US8746483, US8722122, US8523437, US8408792, US8308363, US8114451, US7963413, US7744517, US7604828, US7320545, US7165887, US7086782, US6913387, US6910806, US6360513, US6069294, US5916659, US5345069, US5312634, US5238306, US5188461, US5167974, US5107658, US5103979, US5050736, US5036645, US5030504, US5014856, US5005707, US4925318, US4823961, US4782951, US4692402, US3924051, US3868286, US2010230411, US2008214376, US2007023436, US2007023435, US2006246185, US2003119964, FR2661608,

Abstract:
Source: US3698979A ABSTRACT OF THE DISCLOSURE A laminated film for **packaging** use which film has at least one lamina of a crystalline flexible polyvinylidene chloride film adhered to a lamina of chlorinated polyethylene film, the chlorinated polyethylene film having a chlorine of concentration of up to approximately 60 percent, by weight, with the particular chlorine concentration of from 30 percent to 50 percent, by weight, being preferred. The laminated film being formed by contacting a polyvinylidene chloride film while in a supercooled noncrystalline state with a chlorinated ethylene film and thereafter effecting crystallization of the polyvinylidene chloride film with substantially random crystal distribution throughout, such as, by heating the thus formed laminate to, the crystallization temperature of the polyvinylidene chloride.



314) Family number: 930083 (US3542190A)

Title:	CONVENIENCE **PACKAGE** FOR FLAT **STORAGE** AND SHIPMENT,THAT IS FOLDABLE TO A TETRAHEDRONAL SHAPE FOR MIXING AND **DISPENSING**
Priority:	US19680740601 19680627

Family:

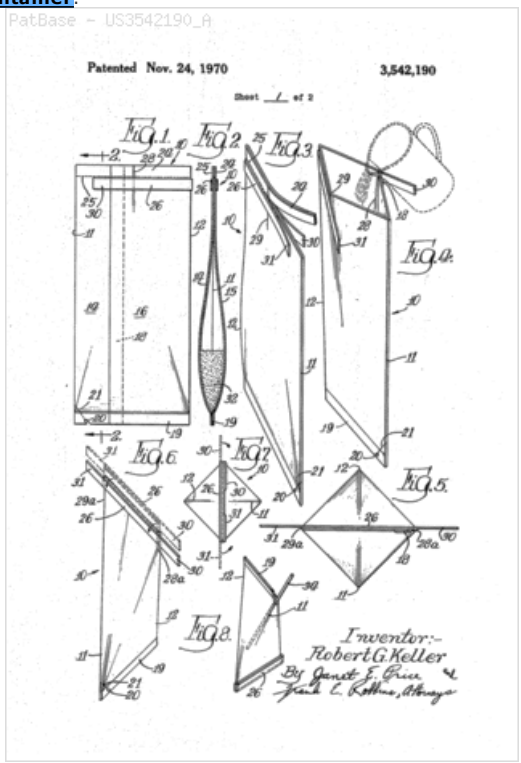
Publication number	Publication date	Application number	Application date
US3542190 A	19701124	US19680740601	19680627

Probable Assignee:	CPC INT INC
Assignee(s):(std):	CPC INT INC ; CPC INTERNATIONAL INC
Assignee(s):	CPC INTERN INC
Inventor(s):(std):	KELLER ROBERT G
Inventor(s):	ROBERT G KELLER
International class (IPC 8-9):	B65D75/58 B65D77/24 (Advanced/Invention); B65D75/48 B65D75/50 (Advanced/Non-invention); B65D75/52 B65D77/24 (Core/Invention); B65D75/00 (Core/Non-invention)
International class (IPC 1-7):	B65D75/50 B65D77/14 B65D83/06 B65D85/72
CPC:	Y10S383/905 Y10S383/906 B65D77/24 B65D75/48 B65D75/50 B65D75/5805 B65D2575/586
European class:	B65D75/58B B65D77/24 L65D575/58R L65D75/48 L65D75/50
US class:	206/46 222/107 383/204 383/905 383/906 383/91 426/111 426/115 426/86

Classification Explorer

Forward Citations: WO9630276, WO17144626, US9751661, US8939643, US8584966, US7823802, US6651848, US6589578, US6585413, US6299012, US6273608, US5184896, US5060803, US4936817, US4898477, US4898280, US4818545, US4803088, US4564107, US4480751, US4397879, US4117934, US2016059998, US2014061235, US2011315751, US2011233297, US2011174832, US2009065605, US2008152768, US2007231431, US2007122067, US2006062497, US2006051491, US2005084583, US2004031823, US2004016771, US2002000441,

Abstract:
Source: US3542190A (Claim 1) 1. I claim. I A flat-walled tubular cdntainer having substahtially parall_l side edges and opposi;ig ends eiiending transversely to said side edget one of the ends of siid **container** hav ng an **opening** therein extending from one side edge of the **container** to the other side edge, the'opposing end of said **container** being cl6sdd: meansforsealingsaidopenin insaidcontainer; U'de means located adjacent said **sealing** means and ex- 9 I tendiiig'across at_least ofie wall of said **container** to the side edges thereof _to facilitate the **opening** of said **container** by the removal of said **sealing** means; **resealing** means adjacint said guide means and the **opening** in said doritainer provid,ed by the removal of said **sealing** means- and said res 'a e lirig means extending from one side edge of said **container** toward the o ppos_l te side edge thereof, 4nd having portions secured to the underlying outer surfaces of the walls of the **container** and extending from said one side e_ge to a point approximately midway between said side edges and portidns overlying but free from said outer suifac_s of said wdfls and extending a substantial distance toward said oppositd side edge of the **container**.



315) Family number: 1070292 (US3732975A)

Title:	STERILE **PACKAGE** FOR CLINICAL THERMOMETERS AND THE LIKE AND METHOD OF MAKING IT
Priority:	US19680736218 19680611 US19700077917 19701005 US19720272159 19720717 US19720285255 19720831

Family:

Publication number	Publication date	Application number	Application date
US3552558 A	19710105	US19680736218	19680611
US3732975 A	19730515	US19700077917	19701005
US3809230 A	19740507	US19720272159	19720717
US3847280 A	19741112	US19720285255	19720831

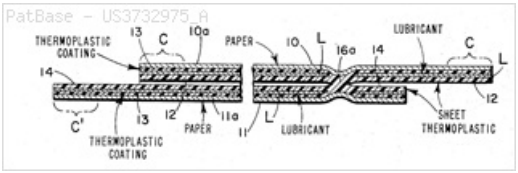
Probable Assignee:	JOHNSON AND JOHNSON
Assignee(s):(std):	GEORGE W PONCY ; JOHNSON AND JOHNSON ; PONCY G ; PONCY GEORGE W
Assignee(s):	PONCY G US ; JOHNSON AND JOHNSON US
Inventor(s):(std):	PONCY G ; PONCY GEORGE W
Inventor(s):	GEORGE W PONCY ; PONCY G US
International class (IPC 8-9):	A61B19/02 G01K1/08 (Advanced/Invention); A61B19/02 (Advanced/Non-invention); A61B19/00 G01K1/08 (Core/Invention); A61B19/00 (Core/Non-invention)
International class (IPC 1-7):	A61B19/02 B65D85/00 B65D85/08
CPC:	A61B2050/316 A61B50/30 G01K1/083
European class:	A61B19/02P G01K1/08B K61B19/02P5D
US class:	206/212 206/30.6 206/306 206/484.2 206/6.3.2 206/63.2 206/632 374/E01.012 374/E1.012 383/210 493/189 493/210 493/212 493/217 493/220

Classification Explorer

Cited documents:	US3552638 A, US3454210 A, US3428046 A, US3372799 A, US3318759 A, US3308940 A, US3227359 A, US3114653 A, US2998880 A, US2760630 A, GB940316 A, CA680083 A,
Forward Citations:	WO11039325, WO09050612, USD728110, US9354122, US9310257, US9259388, US9085392, US9068895, US8920392, US8911773, US8801282, US8801272, US8623404, US8292502, US8292495, US8226294, US8151987, US7921999, US7357788, US6649236, US6468611, US6224543, US6216426, US6051293, US5987855, US5769224, US5401100, US5328368, US5255979, US5107988, US5069337, US4823949, US4652145, US4614442, US4273057, US4241828, US4234084, US4165000, US4164285, US4142631, US4136776, US4051950, US4026751, US3910410, US3889808, US3887072, US3809228, US3703892, US2015313473, US2012230614, US2011174651, US2011174650, US2010305409, US2010286630, US2010268114, US2010268113, US2009099531, US2006111677, US2005187520, GB2218636, GB2218636, ES2052421, EP2309059, EP0092535, DE2527786, DE2332927, CN102079392,

Abstract:

Source: US3732975A An improved sterile, disposable, sheath and sheath **cover** for thermometers and the like, and method of making it, **packaged** so as to preserve the sterility of the sheath during handling and **storage**, the sheath **cover** comprising the **packaging** material being strippable from the sheath along a tear **seal** to expose the same for clinical use when a thermometer or the like is inserted into the sheath. In some applications the sheath is **covered** on its outer surface during manufacture with a lubricant, medicated or otherwise, to facilitate insertion into a body cavity. The **package** is particularly designed for economical mass production.



316) Family number: 937777 (US3554436A)

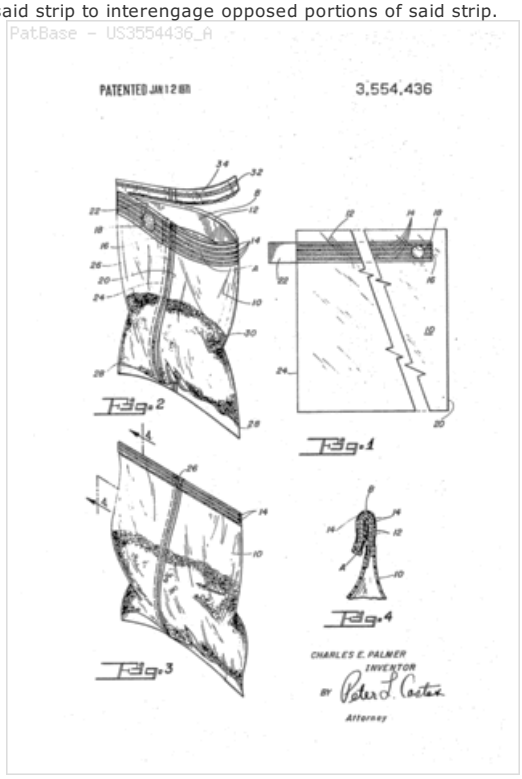
Title:	RECLOSEABLE **BAG** MEMBER
Priority:	US19690830720 19690605

Family:

Publication number	Publication date	Application number	Application date
US3554436 A	19710112	US19690830720	19690605

Probable Assignee:	PALMER CHARLES E
Assignee(s):(std):	PALMER CHARLES E
Assignee(s):	CHARLES E PALMER
Inventor(s):(std):	PALMER CHARLES E
Inventor(s):	CHARLES E PALMER
International class (IPC 8-9):	B65D33/30 (Advanced/Invention); B65D33/16 (Core/Invention)
International class (IPC 1-7):	B65D33/22 B65D33/30
CPC:	Y10S383/905 B65D33/30
European class:	B65D33/30
US class:	229/62 383/107 383/204 383/89 383/905 383/94
Classification Explorer	
Cited documents:	US3330469 A, US218650 A,
Forward Citations:	US6533711, US6517243, US6502986, US6053635, US5984088, US5620095, US5172854, US4706297, US4603537, US4598826, US3655118, US2010205909, US2009257686, US2007068965, CN104875963,

Abstract:
Source: US3554436A (Claim 1) 1. A **bag** member comprising a generally tubular body of synthetic plastic sheet material having a recloseable end portion with a heat **sealable** inner surface, and a relatively thin, substantially continuous strip of nonresiliently deformable material extending about substantially the entire inner periphery of said end portion and secured to said end portion at a point spaced from the edge thereof, said strip partially blocking said **sealable** surface to substantially prevent **sealing** thereat and the edge portion between said edge and strip providing a peripheral band of **sealable** surface at which **sealing** of the inner surface may be effected, said strip being dimensioned relative to the length of said body so as to be located adjacent said end portion with the major portion of said body being free from said strip, said deformable material being capable of maintaining a folded configuration and being nonadherent to itself under the conditions of **sealing** for said **sealable** surface so that subjecting said end portion to the **sealing** conditions effects a **seal** in a location substantially limited to said peripheral band, and said **bag** member is recloseable by folding said **bag** member along said strip to interengage opposed portions of said strip.



317) Family number: 1126189 (US3695806A)

Title: APPARATUS FOR FORMING A PERIPHERAL BEAD IN FLANGE MEANS OF A PREFORMED **CONTAINER**

Priority: US19690854108 19690829 US19700049492 19700624 US19720272059 19720714 US19730370319 19730615

Family:

Publication number	Publication date	Application number	Application date
BE755462 A	19710201		00000000
BE755462 A1	19710201		19700828
CA971921 A1	19750729	CA19700090759	19700813
DE2042937 A1	19710311	DE19702042937	19700829
FR2059417 A5	19710528	FR19700031607	19700828
GB1318425 A	19730531	GB19700040695	19700824
NL7012529 A	19710302	NL19700012529	19700825
US3695806 A	19721003	US19700049492	19700624
US3752387 A	19730814	US19720272059	19720714
US3868917 A	19750304	US19730370319	19730615

Probable Assignee: REYNOLDS METALS CO

Assignee(s):(std)**:** REYNOLDS METALS CO

Assignee(s): REYNOLDS METALS CO US ; REYNOLDS METALS COMPANY ; REYNOLDS METALS CY ; REYNOLDS METALS CY 6601 WEST BROAD STREET HENRICO ; REYNOLDS METALS CY 6601 WEST BROAD STREET HENRICO COUNTY VIRGINIE E U A ; REYNOLDS METALS CY 6601 WEST BROAD STREET HENRICO COUNTY VIRGINIE EUA ; ARFERT HORST FW

Inventor(s):(std)**:** H F W ARFERT ; ARFERT H F W ; ARFERT HORST F W ; ARFERT H

Inventor(s): HORST F W ARFERT ; HFW ARFERT ; ARFERT HORST FW ; ARFERT H US

International class (IPC 8-9): B29C57/12 B65B7/28 B65D43/00 B65D5/64 B65D77/20 (Advanced/Invention); B29C57/00 B65B7/28 B65D43/00 B65D5/64 B65D77/10 (Core/Invention)

International class (IPC 1-7): B21D51/26 B29C17/00 B29C17/02 B29C17/03 B29C27/02 B29C27/022 B65B25/00 B65B51/00 B65B7/28 B65D17/08 B65D17/16 B65D3/14 B65D43/00 B65D5/64 B65D51/00 B65D65/00 B65D81/34

CPC: B29C57/12 B65B7/2857 B65D77/2012 B65D77/2024 B65D2577/2025

European class: B29C57/12 B65B7/28F1A B65D77/20B2 B65D77/20E L65D577/20L

US class: 113/1E 229/125.35 229/4.3 229/5.81 413/26 425/109 425/398 425/504 425/508 425/520 53/329 53/366 53/486

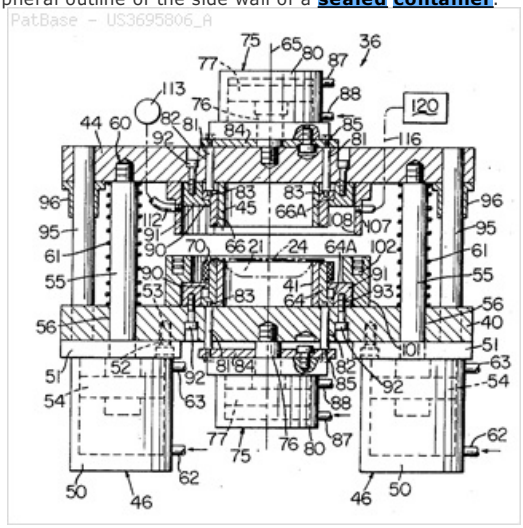
Classification Explorer

Cited documents: US3695806 A, US3695084 A, US3600248 A, US3498525 A, US3496896 A, US3396430 A, US3380272 A, US3348358 A, US3233813 A, US3160999 A, US3070446 A, US3060652 A, US2975931 A, US2968270 A, US2916861 A, US2875563 A, US2337452 A, US2272920 A, US208097 A, US1904920 A, GB980020 A, GB1244320 A, GB1190381 A, GB1072185 A, GB1003169 A, FR1331941 A, FR1131941 A,

Forward Citations: WO9839218, WO9839218, WO13033343, WO06066729, US9783337, US9499299, US8998027, US8939695, US6553804, US6286705, US6093460, US6070507, US5983607, US5943844, US5919496, US5455129, US5328314, US5182121, US4228121, US4127378, US4005975, US4005967, US3954173, US3947204, US3934749, US3930353, US3924803, US3868917, US2013333331, US2009263547, US2004084834, FR2689093, FR2689043, FR2687633, EP1674407, EP0839641, EP0839641, EP0768945, EP0564345, EP0424680, EP0424680, DE4437574, DE4102053, DE19780641, DE19780641,

Abstract:

Source: US3695806A A **closure** having a peripheral flange portion provided with an annular bottom surface is **sealed** by the application of heat and pressure to a dish-like **container** having a peripheral flange portion provided with a cooperating annular top surface so as to define a high quality bonded lamination comprised of the flange portions. The outer portion of the lamination is then curled to form a high strength annular bead which defines the peripheral outline of the side wall of a **sealed** **container**.



318) Family number: 139659 (US3593443A)

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Title: **LABEL** FOR USE IN BLIND CLINICAL STUDIES OF A MEDICAMENT

Priority: US19690858669 19690917

Family:

Publication number	Publication date	Application number	Application date
BE755320 A	19710201		00000000
BE755320 A1	19710201		19700826
GB1260063 A	19720112	GB19700044472	19700917
US3593443 A	19710720	US19690858669	19690917

Probable Assignee: MERCK AND CO INC

Assignee(s):(std)**:** MERCK AND CO INC ; MERCK AND CY INC

Assignee(s): MERCK AND CY INC 126 EAST LINCOLN AVENUE NEW JER ; MERCK AND CY INC 126 EAST LINCOLN AVENUE NEW JERSEY E U A

Inventor(s):(std)**:** DEMETRIUS J C ; DEMETRIUS JULIUS CHRIST JR ; GRIM W M ; GRIM WAYNE MARTIN ; J C DEMETRIUS ; W M GRIM

Inventor(s): WAYNE MARTIN GRIM ; WM GRIM ; JC DEMETRIUS ; JULIUS CHRIST DEMETRIUS JR

International class (IPC 8-9): G09F3/00 G09F3/02 (Advanced/Invention); G09F3/00 G09F3/02 (Core/Invention)

International class (IPC 1-7): A44C3/00 G09F3/00 G09F3/02

CPC: Y10S283/90 G09F3/00 G09F3/0288

European class: G09F3/00 G09F3/02C

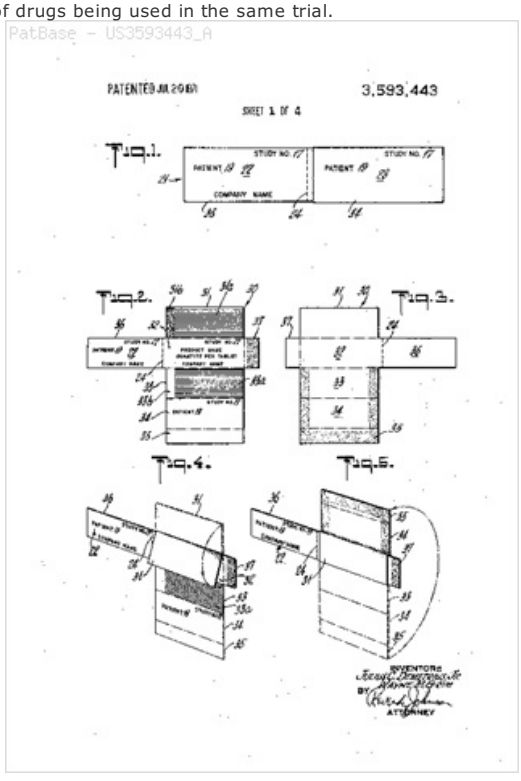
US class: 283/105 283/81 283/900 40/2 40/638 40/672 40/674

Classification Explorer

Cited documents: US3497982 A, US2833064 A, US2659614 A, US1277696 A,

Forward Citations: WO8501604, US6506467, US6387202, US6364990, US6350502, US6349974, US6110553, US6102441, US6082777, US6065778, US6035568, US6027780, US6015470, US5878901, US5830550, US5829789, US5800893, US5782495, US5738381, US5484168, US4431214, US4122947, US4048737, US3994085, US3956049, US3930673, US3894531, US3740081, US2008066359, US2007014958, US2005253374, US2004026024, EP0239273, EP0239273,

Abstract:
Source: GB1260063A 1,260,063. **Labels**. MERCK and CO. Inc. 17 Sept., 1970 [17 Sept., 1969], No. 44472/70. Heading B8F. Printed information on a panel 32 of a **label** 30 (Fig. 2) is obscured by folding an upper panel 31 downwards to **cover** the information. A further panel 33 is folded back to underly panel 32, both panels 31 and 33 being substantially **covered** with ink to prevent information on panel 32 being read by holding the **label** up to the light. A side panel 37 is folded either before or after folding panel 31, and the panel 34 is folded down to overly panel 32. Finally short panel 35 is folded to underly panel 32. The folded **label** is secured by adhesive applied along margin 31b and on panel 37, and also along the margins of panels 33-35 on the rear surface of the blank. A further panel 36 is detachably secured to panel 32 and bears common identifying indicia with the front of panel 34. Alternatively, the rear surface of the blank may be coated with heat-sensitive adhesive and the right- and left-hand margins of panels 31 removed, panel 37 being omitted. After folding, the **label** is compressed and heated to **seal** the panels together. In a further heat-**sealed** modification the panel 35 may be omitted and all three margins of panel 31 may be reduced in size. The fourth panel (equivalent to panel 34) may be provided to the right of panel 33, panels 37 and 35 being omitted, and the right and top margins of panel 31 removed. After folding panel 33 to underly panel 32, the fourth panel is folded round the right-hand edge of the **label** to overly panel 32, and the **label** heat **sealed** as before. Finally, the blank may only comprise four panels (Figs. 13 and 14, not shown) corresponding to panels 31-33 and 36, and the common identifying indicia are printed on the rear of the top panel. Adhesive is supplied round the margins of the front of the top panel, and the margins of the rear of the bottom panel. The **label** is adapted for " blind clinical trials," wherein the nature and dose of a medicament are printed on the second panel 32, but only the patient's number and the " trial " number are exposed on the common identifying panels. The **labels** are adhered to a drug **container** by the further panel, and the main portion is detached by a clinician and kept with a patient's record. If it is necessary to determine the nature and dose administered to a particular patient, the main portion may be **opened** without disclosing information of other samples of drugs being used in the same trial.



319) Family number: 3810426 (US3734340A)

Title: **CONTAINERS** AND LINERS FOR USE IN COMPACTING SYSTEMS OR THE LIKE

Priority: CA19700089719 19700731 CA19730182446 19731002 US19710171710 19710813 US19710171708 19710813 US19710171709 19710813 US19690847567 19690805 US19710171711 19710813

Family:

Publication number	Publication date	Application number	Application date
CA940498 A1	19740122	CA19700089719	19700731
CA953261 A1	19740820		00000000
CA953261 A2	19740820	CA19730182446	19731002
CA953263 A1	19740820	CA19720149007	19720809
DE2038617 A1	19710211	DE19702038617	19700804
DE2239150 A1	19730222	DE19722239150	19720809
GB1326425 A	19730815	GB19700037365	19700803
GB1326426 A	19730815	GB19700014806	19700326
GB1359271 A	19740710	GB19720036903	19720808
GB1359272 A	19740710	GB19730028313	19720808
JP48030870 B4	19730925	JP19700068263	19700805
JP48035966 A2	19730526	JP19720080839	19720814
US3734340 A	19730522	US19710171711	19710813
US3765143 A	19731016	US19710171710	19710813
US3765147 A	19731016	US19710171708	19710813
US3765148 A	19731016	US19710171709	19710813

Probable Assignee: ENVIRONMENTAL POLLUTION RES CO

Assignee(s):(std)**:** ENVIRONMENTAL POLLUTION RESEAR ; ENVIRONMENTAL POLLUTION RES CO

Assignee(s): ENVIRONMENTAL POLLUTION RES CORP US ; ENVIRONMENTAL POLLUTION RESEARCH CORP ; MA WILLIAM YL ; IPPOLITO AMOS D ; MA WILLIAM Y L

Inventor(s):(std)**:** IPPOLITO A ; IPPOLITO AMOS D ; MA W ; MA WILLIAM Y L ; MA WILLIAM YUNG LING ; IPPOLITO AMOS DR ; LING MA WILLIAM YUNG ; D IPPOLITO AMOS

Inventor(s): MA WILLIAM YL ; MA W US ; IPPOLITO A US

International class (IPC 8-9): B30B9/30 B65B27/00 B65D25/14 B65D90/54 (Advanced/Invention); B30B9/00 B65B27/00 B65D25/14 B65D90/00 (Core/Invention)

International class (IPC 1-7): B30B9/30 B62B3/00 B62B3/02 B65B1/24 B65B67/12 B65D25/14 B65D25/16 B65F1/00 B65F1/14 E04F17/10 F23G3/00

CPC: B30B9/3007 F23G5/448 B65F1/0093 Y10S220/908 B30B9/3032

European class: B30B9/30C2 B30B9/30C9 B65F1/00C F23G5/44B5

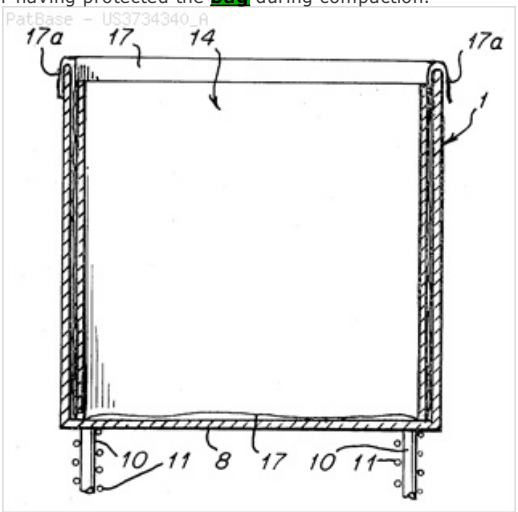
US class: 100/100 100/229.00A 100/229A 100/255 100/49 141/390 141/391 206/404 206/462 206/463 220/495.11 220/6.3R 220/629 220/908 248/99 53/111RC 53/12.4B 53/24 53/436 53/508 53/52 53/527

Classification Explorer

Cited documents: US696832 A, US579228 A, US3602136 A, US3592130 A, US3541949 A, US3531909 A, US3501890 A, US3481268 A, US3386372 A, US3280727 A, US325254 A, US3229618 A, US3115986 A, US2984957 A, US2627824 A, US2529816 A, US2033191 A, US1861112 A, US1786827 A, US1738326 A, DE1176563 B,

Forward Citations: WO9411253, WO12063051, US9896266, US9701470, US9550623, US9517884, US9352870, US9198354, US9102432, US9079372, US9056715, US8840072, US8757563, US8234977, US8196735, US7762565, US7650916, US7159734, US6296138, US6109002, US6082574, US5737903, US5303642, US5299493, US5271589, US5214594, US5183175, US5160063, US5155976, US5129318, US5016197, US4978028, US4923080, US4841853, US4749011, US4735136, US4638730, US4463669, US4372101, US4284000, US4167271, US4156386, US4086168, US4073228, US4054225, US4041858, US3995543, US3979008, US3945314, US3937354, US3936087, US3917107, US3915329, US3890890, US3885467, US3882771, US3868903, US3862595, US2011309209, US2011198195, US2011126724, US2008197645, US2005198921, US2003218104, US2003074264, NL1037188, GB2132552, FR2701874, FR2673144, FR2659634, FR2618767, FR2557478, EP3112754, EP1167240, EP0301926, DE8911558, DE4238498, DE4128296, DE3637769, DE2939205, DE2742792, DE102006010772, CN104210680, AT400317,

Abstract:
Source: US3734340A A **container** for use with a compacting system includes spring loaded retractable wheel mechanism on the bottom thereof to facilitate handling of the **container**. The wheels are automatically retracted during the compaction operation due to the pressure of compaction. A liner to enable disposable **bags** to be more expeditiously used is preferably square in shape and is fabricated of plastic material or the like. Located between the liner and an outer **container** is a disposable **bag**. After compaction is complete a portion of the **container** is swung **open** and the liner deforms due to residual compression force in the compacted material. This releases the compacted material from the liner and enables the liner to be easily lifted out, the result being that the compacted material remains in the disposable **bag**, the liner having protected the **bag** during compaction.



320) Family number: 666975 (US3783089A)

Title:	HEAT **SEALED**,READILY PEELABLE OR TEARABLE STRUCTURE SUITABLE FOR **CLOSURES**,**LABELS**,**PACKAGING**,ETC.
Priority:	US19690816506 19690416 US19710166981 19710728

Family:

Publication number	Publication date	Application number	Application date
CA921865 A1	19730227	CA19700075426	19700220
FR2044725 A1	19710226	FR19700013611	19700415
FR2044725 B1	19731221	FR19700013611	19700415
GB1298688 A	19721206	GB19700018021	19700415
US3783089 A	19740101	US19710166981	19710728

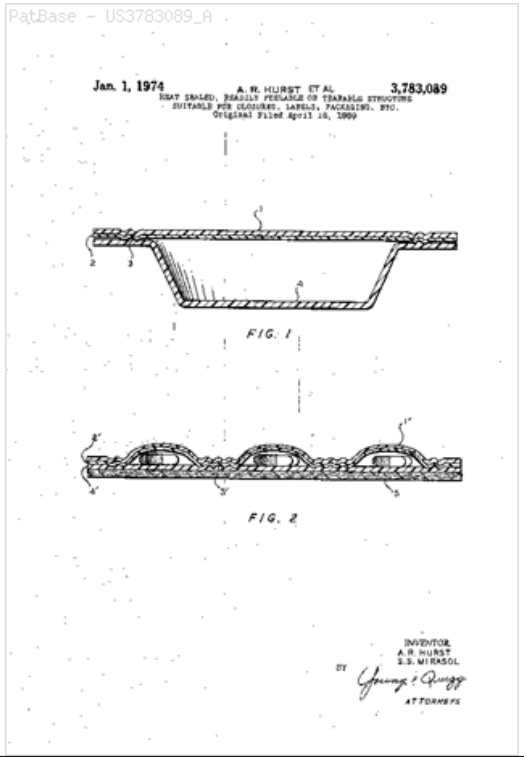
Probable Assignee:	JAMES RIVER US HOLDINGS INC A CORP OF DE
Assignee(s):(std)**:**	PHILLIPS PETROLEUM CO
Assignee(s):	JAMES RIVER US HOLDINGS INC ; PHILLIPS PETROL CO US ; PHILLIPS PETROLEUM COMPANY ; PHILLIPS PETROLEUM CY ; PHILLIPS PETROLEUM CY US ; HP SMITH PAPER CO AN ILL CORP ; JAMES RIVER US HOLDINGS INC A CORP OF DE ; SALUSTIANO S MIRASOL JR ; ALAN R HURST ; HP SMITH INC ; HP SMITH INC A OF DE CORP ; HP SMITH PAPER CO
Inventor(s):(std)**:**	MIRASOL S ; MIRASOL S JR ; HURST A ; HURST A R
Inventor(s):	HURST A US ; ALAN R HURST ; MIRASOL S US ; SALUSTIANO S MIRASOL JR
International class (IPC 8-9):	B29C53/60 B32B27/00 B65D75/32 B65D75/34 (Advanced/Invention); B29C53/00 B32B27/00 B65D75/28 (Core/Invention)
International class (IPC 1-7):	B32B27/00 B32B27/08 B32B27/32 B32B7/00 B65B51/00 B65D17/00 B65D6/00 B65D65/38 B65D65/40 B65D85/56
CPC:	B65D75/326 B65D75/367 B32B27/08 B29C53/60 B32B27/00 B32B27/10 B32B27/281 B32B27/32 B32B2307/31 B32B2323/043 B32B2323/046 B32B2439/70 B65D75/327 B65D2575/3245
European class:	B29C53/60 B32B27/00 B65D75/32D1 B65D75/32D3 B65D75/36H L65D575/32Y1D
US class:	161/16.6 220/359.3 229/123.1 229/125.35 426/122 426/123 428/38 53/412 53/477 53/478

Classification Explorer

Cited documents:	US2956723 A,
Forward Citations:	WO9411170, WO8401556, WO0164528, US9532836, US8740003, US7950864, US7651290, US7141256, US7141256, US6869059, US6843042, US6670023, US6667067, US6372273, US6311500, US6273610, US6248380, US6058682, US6042862, US6041202, US6033758, US6032800, US6015583, US5919547, US5915560, US5909822, US5865335, US5779832, US5779050, US5715967, US5692635, US5686127, US5686126, US5632134, US5631036, US5577370, US5474194, US5393032, US5220769, US5176314, US5137208, US5116677, US5092469, US5036646, US5028290, US5024044, US4998989, US4945708, US4928837, US4923750, US4899976, US4890763, US4567986, US4475241, US4456164, US4418114, US4399180, US3953661, US3923190, US2015342684, US2013299499, US2012305584, US2008026106, US2007147942, US2007134048, US2006255055, US2006251464, US2006013929, US2005070873, US2003141218, US2003134013, US2003056475, US2002078833, JP58030957, FR2446223, FR2429720, EP0406515, EP0406515, EP0170885, EP0009376, EP0009376, EP0002606, EP0001898,

Abstract:

Source: GB1298688A 1298688 Laminates seaming non-metallic sheet material PHILLIPS PETROLEUM CO 15 April 1970 [16 April 1969] 18021/70 Headings B5K and B5N [Also in Division B8] An article of manufacture e.g. a **package** comprises a substrate 4 e.g. a tray having a surface composed of high density polyethylene and, heat-**sealed** to said surface, a peel-off laminate comprising a backing layer 1 composed of a thermoplastic polyamide, polyester, polycarbonate or polyolefine and a surface layer 2 heat-**sealed** to said high density polyethylene surface, said surface heat-**sealed** layer having a thickness in the range 0A2 to 1A5 mils. and being composed of a thermoplastic polymer of ethylene having a density, melting point, tensile strength and tear strength all lower than those of the backing layer. In the embodiment of Fig. 2, the article comprises a blister **package**, the substrate being of cardboard coated with a high density polyethylene. Specified backing layers are polyethylene terephthalate, polyethylene, polypropylene, nylon-6, nylon-11, nylon-12, nylon-6/6 and nylon-6/10. An additional material e.g. polyvinyl chloride, polyvinylidene chloride, aluminium or cellulosic material may be laminated to the reverse surface of the backing layer. The laminate may be made by extrusion on to the backing layer.



321) Family number: 1376409 (US3664878A)

Title: PRESSURE RELIEF VENT VALVE FOR A FLUID TIGHT **SEALED** **CONTAINER** ESPECIALLY AN ALKALINE GALVANIC CELL

Priority:

CA19700087297 19700706	CA19750234351 19750826	DE19702065583 19700827
DK19730002503 19730507	DK19730002503 19730507	DK19700004394 19700827
GB19700041208 19700827	US19690853279 19690827	US19690853279 19690827

Family:

Publication number	Publication date	Application number	Application date
AT304662 B	19730125	AT19700007801	19700827
AT308868 B	19730725	AT19710010009	19700827
AT310836 B	19731025	AT19710010008	19700827
BE755411 A	19710301		00000000
BE755411 A1	19710301		19700827
CA1000352 A1	19761123	CA19750234351	19750826
CA1000352 A2	19761123	CA19750234351	19750826
CA983101 A1	19760203	CA19700087297	19700706
DE2042417 A1	19710401	DE19702042417	19700827
DE2042417 B2	19740131	DE19702042417	19700827
DE2042417 C3	19740822	DE19702042417	19700827
DE2065583 A1	19740418	DE19702065583	19700827
DK132918 B	19760223	DK19700004394	19700827
DK132918 C	19760830	DK19700004394	19700827
DK137106 B	19780116	DK19730002503	19730507
DK137106 C	19780619	DK19730002503	19730507
GB1336567 A	19731107	GB19700041208	19700827
GB1336568 A	19731107		19700827
JP48042300 B4	19731212	JP19700075231	19700827
JP49049459 B4	19741227	JP19730114066	19731012
NO135959 B	19770321	NO19700003266	19700827
NO135959 C	19770629	NO19700003266	19700827
NO140282 B	19790423	NO19740002635	19740718
NO140282 C	19790801	NO19740002635	19740718
NO141700 B	19800114	NO19740002659	19740719
NO141700 C	19800423	NO19740002659	19740719
US3664878 A	19720523	US19690853279	19690827

Probable Assignee: EVEREADY BATTERY CO INC A CORP OF DE

Assignee(s):(std)**:** UNION CARBIDE CORP

Assignee(s): UNION CARBIDE CORP NEW YORK N Y V ST A ; UNION CARBIDE CORP 270 PARK AVENUE NEW YORK ETAT DE NEW YORK 10017 E U A ; AMTHOR HELMUT K ; EVEREADY BATTERY CO INC ; EVEREADY BATTERY CO INC A CORP OF DE ; MORGAN GUARANTY TRUST CO ; MORGAN GUARANTY TRUST CO OF NEW YORK AND MORGAN BA ; MORGAN GUARANTY TRUST CO OF NEW YORK AND MORGAN BANK (DELAWARE) COLLATERAL (AGENTS) SEE RECORD FOR REMAINING ASSIGNEES AS ; MORGAN GUARANTY TRUST CO OF NEW YORK AND MORGAN BANK DELAWARE COLLATERAL AGENTS SEE RECORD FOR REMAINING ASSIGNEES AS

Inventor(s):(std)**:** AMTHOR H K ; AMTHOR HELMUT K ; AMTHOR HELMUT KASPAR ; H K AMTHOR

Inventor(s): HELMUT K AMTHOR ; HELMUT KASPAR AMTHOR ; HK AMTHOR ; WIRD SPAETER GENANNT WERDEN ; AMTHOR HELMUT KASPAR ROCKY RIVER OHIO V ST A ; AMTHOR HELMUT KASPAR ROCKY RIVER OHIO VSTA

International class (IPC 8-9): F16K17/04 F16K7/20 H01M2/04 H01M2/12 (Advanced/Invention); F16K17/04 F16K7/00 H01M2/04 H01M2/12 (Core/Invention)

International class (IPC 1-7): F16K17/00 F16K17/02 F16K17/04 F16K17/14 F16K7/20 H01M1/02 H01M1/06 H01M2/12

CPC: F16K17/0446 H01M2/0413 H01M2/0421 H01M2/1229

European class: F16K17/04H H01M2/04B2B H01M2/04B2C2 H01M2/12C2 Y02E60/12

US class: 136/178 429/185 429/54

Classification Explorer

Cited documents: US3415690 A, US3398026 A, US3337900 A, US3293081 A, US3208884 A, US3042734 A, US2790570 A, US2321089 A, US2306982 A, US2182266 A,

Forward Citations: WO9504381, WO08000384, WO06049989, US9437906, US8597821, US8338009, US8048557, US7378168, US6087041, US5981099, US5080984, US5004656, US4629665, US4592970, US4556612, US4532705, US4529673, US4437231, US4397919, US4329405, US4328289, US4298662, US4271241, US4063902, US2011171504, US2009312835, US2008187829, US2008160373, US2007111089, US2006257701, GB2165391, FR2400263, EP2339668, EP0793283, EP0422966, EP0360395, EP0100487, EP0049081, EP0049080, DE3510462, DE3151606,

Abstract:
Source: US3664878A A pressure relief vent valve for a fluid-tight **sealed** **container** and especially a **sealed** alkaline galvanic cell, the pressure relief vent valve comprising a resilient deformable ball of an elastomeric material which is positioned to overlie a vent orifice provided within the **container** and a retainer means for maintaining the ball in place over the vent orifice and in contact with a valve seat provided around the peripheral edge portions of the vent orifice and for compressing and deforming the ball into a flattened configuration forming a normally fluid-tight **seal** between the ball and the valve seat.

PatBase - US3664878_A

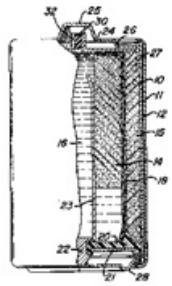


FIG. 1.

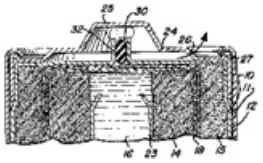


FIG. 2.

INVENTOR
Helmut K. Amthor
BY
ATTORNEY

322) Family number: 1303996 (US3664238A)

Title:	APPARATUS FOR MAKING MULTI-PLY PAPER **BAGS**
Priority:	CA19700074797 19700213 CA19720132910 19720121 US19700077416 19701002 US19690818909 19690424

Family:

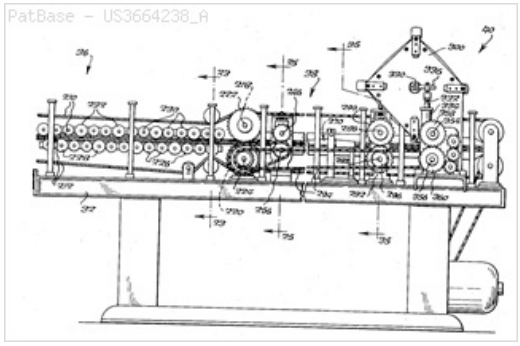
Publication number	Publication date	Application number	Application date
CA938483 A1	19731218	CA19720132910	19720121
CA938483 A2	19731218	CA19720132910	19720121
JP51000918 B4	19760112	JP19700035085	19700423
US3567111 A	19710302	US19690818909	19690424
US3664238 A	19720523	US19700077416	19701002

Probable Assignee:	INT PAPER CO
Assignee(s):(std)**:**	INT PAPER CO
Assignee(s):	INTERNATIONAL PAPER CO ; INTERNATIONAL PAPER COMPANY ; ROBERT O BAXTER ; CARLTON F EVANS ; CLINTON R HOLLIS
Inventor(s):(std)**:**	BAXTER R ; BAXTER ROBERT O ; EVANS C ; EVANS CARLTON F ; HOLLIS C ; HOLLIS CLINT R ; HOLLIS CLINTON R
Inventor(s):	ROBERT O BAXTER ; CARLTON F EVANS ; CLINT R HOLLIS ; CLINTON R HOLLIS
International class (IPC 8-9):	B31B39/00 B65D33/02 (Advanced/Invention); B31B39/00 B65D33/02 (Core/Invention)
International class (IPC 1-7):	B31B1/00 B31B1/60 B31B31/00 B31B39/00 B65D33/02 B65D33/22
CPC:	Y10T156/1339 Y10T156/1768 B65D33/02 B31B70/261 B31B2155/00 B31B2170/20
European class:	B31B37/00 B65D33/02 L31B219/26K L31B237/05
US class:	156/443 156/521 156/566 229/57 383/113 383/121 383/89 493/190 493/214 493/223 493/241 493/245 93/8R

Classification Explorer

Cited documents:	US3470796 A, US2169936 A, US1916854 A,
Forward Citations:	US9056697, US8604399, US8282539, US6626570, US6095960, US5569145, US4637063, US4461031, US3973045, US3924008, US3783751, US3706625, US3647134, US2011089168, US2011013859, US2010150479, US2009324143, US2007047853, US2007042146, US2006269173, US2005281928, US2005100252, JP54094216, EP2679511, EP0780222, EP0780222,

Abstract:
Source: US3664238A Apparatus for the manufacture of multi-ply paper **bags** having means for advancing **bag** blanks one after the other along a path, means along the path for heating the bottom end of the blank to soften the thermoplastic coating, means for applying a **sealing** force to the softened thermoplastic coating, means for holding the **seal** while the thermoplastic coating cools and hardens, means for embossing the **bag** blank along a fold line for folding the **bag** blank end along the fold line and for folding the folded portion into the side wall of the blank and means for applying, coating and adhesively securing a tape to the folded portion and the side wall of the blank.



323) Family number: 29746107 (US4017002A)

Title: **DISPENSING** MOIST TREATED TOWELS OR TISSUES

Priority: GB19700015535 19700401 GB19720053248 19721117 US19710128800 19710329 US19720222882 19720202 US19740432620 19740111 US19690856096 19690908

Family:

Publication number	Publication date	Application number	Application date
AT303304 B	19721127	AT19700008112	19700907
BE755729 A	19710303		00000000
BE755729 A1	19710303		19700904
CA940492 A1	19740122	CA19700092032	19700831
CH527601 A	19720915	CH19700013377	19700908
DE2044265 A1	19710311	DE19702044265	19700907
DE2044265 B2	19760122	DE19702044265	19700907
DE2044265 C3	19760909	DE19702044265	19700907
DE7033308 U	19750522	DE19700033308U	19700907
DK144294 B	19820208	DK19700004582	19700907
DK144294 C	19820705	DK19700004582	19700907
FR2061000 A5	19710618	FR19700032309	19700904
GB1305928 A	19730207	GB19700015535	19700401
GB1382183 A	19750129	GB19720053248	19721117
IE34507 B	19750528	IE19700001156	19700904
IE34507 L	19710308	IE19700001156	19700904
NL7013159 A	19710310	NL19700013159	19700904
SE378174 B	19750825	SE19700012121	19700907
US4017002 A	19770412	US19740432620	19740111

Probable Assignee: STERLING DRUG INC

Assignee(s):(std)**:** STERLING DRUG INC ; STERLING DRUG INC 90 PARK AVENUE NEW YORK STATE O ; STERLING DRUG INC NEW YORK N Y V ST A

Assignee(s): DOYLE ROSS L ; HARRISON THOMAS S ; STERLING DRUG INC 90 PARK AVENUE NEW YORK STATE OF ; STERLING DRUG INC 90 PARK AVENUE NEW YORK STATE OF NEW YORK E U A

Inventor(s):(std)**:** DOYLE R L ; DOYLE ROSS L ; DOYLE ROSS LEE ; DOYLE ROSS LEE RAMSEY NJ ; HARRISON T S ; HARRISON THOMAS S ; HARRISON THOMAS SOUTHWORTH ; HARRISON THOMAS SOUTHWORTH CANAAN CONN ; R L DOYLE ; RL DOYLE ; ROSS LEE DOYLE ; T S HARRISON ; THOMAS SOUTHWORTH HARRISON ; TS HARRISON

Inventor(s): SOUTHWORTH HARRISON THOMAS ; LEE DOYLE ROSS

International class (IPC 8-9): A47K10/34 A47K10/38 B65D83/08 B65D85/671 (Advanced/Invention); A47K10/32 (Advanced/Non-invention); A47K10/24 B65D83/08 B65D85/67 (Core/Invention)

International class (IPC 1-7): A47K10/18 A47K10/22 A47K10/24 A47K10/32 A47K10/38 A61F15/00 B65D25/52 B65D83/00 B65D83/08 B65D83/14 B65D85/00 B65H1/00

CPC: A47K10/38 A47K10/34 B65D85/671 A47K10/3818 A47K2010/3206 A47K2010/3266 B65D83/0805 Y10T428/15

European class: A47K10/34 A47K10/38 A47K10/38B1 B65D83/08B B65D85/671 K47K10/32B K47K10/32W

US class: 206/205 221/63 428/43 D7/511

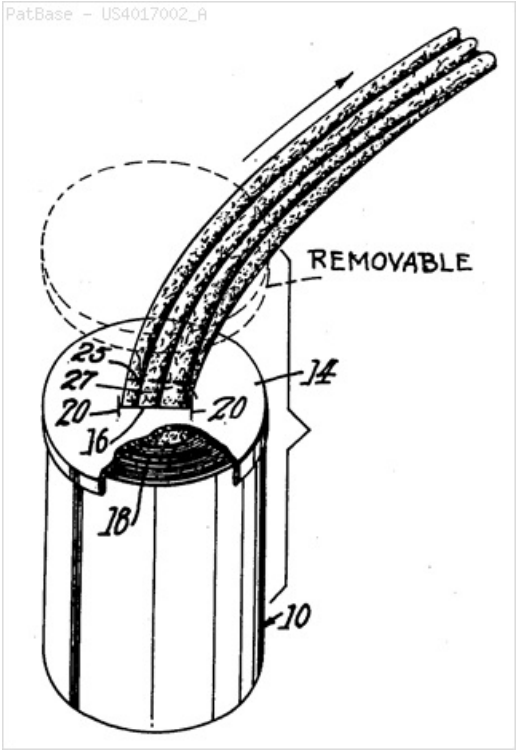
Classification Explorer

Cited documents: US3368522 A, US3310353 A, US3150808 A, US2864495 A, US2806591 A, US2323395 A, US2004614 A, GB189907721 A,

Forward Citations: WO9929602, WO9606556, WO06026119, WO0035327, USRE40408, USD564363, USD537365, USD466807, USD446452, USD444063, USD421528, US8944279, US8814021, US8418879, US7992745, US7793810, US7465266, US7380687, US7081080, US7070143, US7063245, US7045191, US7028840, US6971542, US6921024, US6905748, US6903307, US6899250, US6848595, US6847011, US6840401, US6766919, US6758368, US6749083, US6736287, US6639185, US6612462, US6604651, US6592004, US6588626, US6585131, US6554156, US6550633, US6523690, US6439386, US6346153, US6318590, US6189730, US6138867, US6018092, US5971138, US5925004, US5718353, US5656315, US5616387, US5560514, US5549227, US5496605, US5152121, US5141803, US5118022, US5076424, US4975217, US4899905, US4826062, US4651895, US4638921, US4611728, US4570820, US4534491, US4526291, US4462507, US4436221, US4387832, US4349288, US4337876, US4328907, US4262816, US4219129, US4181218, US4180160, US3986479, US2013175283, US2012111751, US2010133287, US2008256804, US2007045334, US2007044928, US2006283751, US2006266761, US2006266663, US2006070990, US2006046024, US2005247720, US2005040179, US2005006399, US2004251265, US2004149833, US2004118862, US2004115393, US2003178336, US2003111481, US2002195764, JP2013227046, JP2008239180, GB2441323, FR2860699, FR2530941, EP1053956, EP0392316, EP0364896, EP0325761, EP0117074, EP0109343, DE29711723, DE2849366, DE2802443, DE2802443, DE2750281, DE2405793, DE102006048062,

Abstract:
Source: US4017002A A substantially airtight **container** for an elongated web of perforated wet impregnated tissue-like material, the web being free-flowing and having a minimum of friction within the **container**, being manually pulled to be **dispensed** through a substantially closed but yielding slit in a wall of the **container**, the slit **opening** slightly to permit the exit of the web but tending to return to closed condition especially at its ends, to impart sufficient drag on the web to cause progressive severing of the web into separate sheets as the web is pulled through the slit, leaving a tip of the web still contained exposed to be grasped for the next **dispensing** step.

PatBase - US4017002_A



324) Family number: 1198032 (US3919373A)

Title: METHOD OF MAKING A LIQUID **CONTAINER** FROM THERMOPLASTIC SYNTHETIC MATERIAL

Priority: DE19691946737 19690916 US19700072389 19700915 US19730387854 19730813 US19730387853 19730813

Family:

Publication number	Publication date	Application number	Application date
AT305133 B	19730212	AT19700007948	19700902
CA963213 A1	19750225	CA19700093176	19700915
DE1946737 A1	19710325	DE19691946737	19690916
FR2061727 A1	19710625	FR19700032209	19700904
FR2061727 B1	19740823	FR19700032209	19700904
GB1318384 A	19730531	GB19700043338	19700910
JP54006592 B4	19790329	JP19700080112	19700914
NL171336 B	19821018	NL19700013644	19700915
NL171336 C	19830316	NL19700013644	19700915
NL7013644 A	19710318	NL19700013644	19700915
US3919373 A	19751111	US19730387853	19730813
US3954369 A	19760504	US19730387854	19730813

Probable Assignee: ELBATAINER KUNSTSTOFF

Assignee(s):(std)**:** ELBATAINER KUNSTSTOFF

Assignee(s): ELBATAINER KUNSTSTOFF DT ; ELBATAINER KUNSTSTOFF U VERPACKUNGS GES MBH AND CO ; ELBATAINER KUNSTSTOFF U VERPACKUNGS GMBH AND CO ; ELBATAINER KUNSTSTOFF UND VERPACKUNGS G M B H AND ; ELBATAINER KUNSTSTOFF UND VERPACKUNGS G M B H AND CO ; ELBATAINER KUNSTSTOFF UND VERPACKUNGS GESELLSCHAFT MBH AND CO ; ELBATAINER KUNSTSTOFF UND VERPACKUNGS GMBH AND CO ; ELBATAINER KUNSTSTOFF UND VERPACKUNGS GMBH CO ; ELBATAINER KUNSTSTOFF UND VERPACKUNGSG M B H AND CO TE ETTLINGEN BONDSREPUBLIEK DUITSLAND ; KORMENDI KALMAN

Inventor(s):(std)**:** KORMENDI KALMAN ; KOERMENDI KALMAN

International class (IPC 8-9): B29B11/10 B29C49/00 B29C49/04 B29C49/20 B29C49/28 B29C49/42 B29C49/48 B29C65/00 B65D88/06 B65D88/12 B65D90/52 (Advanced/Invention);
B29C49/04 (Advanced/Non-invention);
B29B11/00 B29C49/00 B29C49/04 B29C49/20 B29C49/28 B29C49/42 B29C49/48 B29C65/00 B65D88/00 B65D90/00 (Core/Invention);
B29C49/04 (Core/Non-invention)

International class (IPC 1-7): B29C17/07 B29D23/03 B29D23/05 B29D3/02 B29D31/00 B65D1/00 B65D1/14 B65D25/04 B65D87/00 B65D87/12 B65D87/14 B65D88/02 B65D90/02 B65D90/52

CPC: B65D88/12 Y10S425/024 B65D88/06 B29C49/04 B29C49/20 B29C49/48 B29C2049/2008 B29C2049/2013 B29L2031/7172 B65D90/52

European class: B29C49/20 B29C49/48 B65D88/06 B65D88/12 B65D90/52 L29C49/04 L29C49/20B2 L29C49/20B2A L29L31/7172

US class: 156/598 220/553 264/248 264/278 264/511 264/515 264/516 264/526 264/531 264/540 264/89 425/150 425/325 425/326B 425/503 425/525 425/532 425/535 425/DIG.24

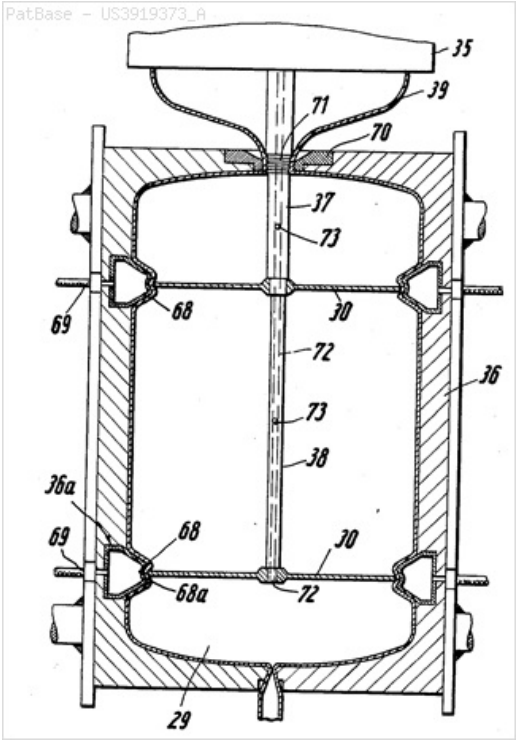
Classification Explorer

Cited documents: US3655849 A, US3424623 A, US3358062 A, US3189422 A, US2541249 A, US2214330 A, GB1001737 A, FR83960 E, FR1453699 A, FR1411089 A, FR1354848 A, DE1455496 A1,

Forward Citations: WO9210354, WO16088089, WO11054709, WO08138869, WO0200417, US9764507, US9463592, US9452577, US9440403, US9346211, US9327461, US9296164, US8968634, US8951461, US8720732, US8663544, US8647559, US8636943, US8608011, US8282875, US8235241, US8105528, US7993127, US7690914, US7476354, US6715195, US6645421, US6012212, US5891385, US5776568, US5589112, US5534218, US5459904, US5346092, US5326514, US5308573, US5147064, US4952347, US4911878, US4891000, US4840282, US4719072, US4584041, US2015217635, US2014120204, US2011226777, US2011221103, US2010126659, US2010092600, US2009162472, US2006061009, JP55079121, JP55011846, GB2279606, GB2279606, GB2201628, GB2201628, FR2915923, FR2582628, EP2946907, EP2944449, EP2319719, EP2155469, EP0770470, EP0687546, EP0687546, EP0514555, EP0466275, EP0306643, EP0195924, DE8710906, DE4420879, DE3730488, DE3730488, DE3042926, DE2847117, DE2622737, DE2619590, DE19814965, DE19814965, DE102011012707, DE102009031441, DE10107075, CN102328439, CN102328439, CN102205627, CN101678595,

Abstract:
Source: US3919373A A closed liquid **container** of thermoplastic synthetic-resin material is formed by blowing and in the production of such **containers** the blowing method includes disposing at least one construction element by material deformation within the **container** wall for dividing the inner space of the **container** into sections, the element so disposed serving simultaneously as a reinforcement and an intermediate wall of the **container**.

PatBase - US3919373_A



325) Family number: 6301692 (US3683889A)

Title: HEATING **CONTAINER**

Priority: AT19690008751 19690916 AT19700008751 19700916

Family:

Publication number	Publication date	Application number	Application date
AT296868 B	19720225	AT19690008751	19690916
CH515018 A	19711115	CH19700013072	19700901
DE2042693 A1	19710318	DE19702042693	19700828
FR2060905 A5	19710618	FR19700032086	19700903
GB1329122 A	19730905	GB19700043812	19700914
JP49022167 B4	19740606	JP19700080101	19700914
SE365108 B	19740318	SE19700012449	19700914
US3683889 A	19720815		19700902

Probable Assignee: HOFFMANN VIKTORIA

Assignee(s):(std)**:** HOFFMANN V ; HOFFMANN VIKTORIA ; VIKTORIA HOFFMAN

Assignee(s): VIKTORIA HOFFMANN ; HOFFMANN V OE

Inventor(s):(std)**:** VIKTORIA HOFFMANN ; HOFFMANN VIKTORIA ; HOFFMANN V ; HOFFMAN VIKTORIA

Inventor(s): HOFFMANN V OE ; VIKTORIA HOFFMAN

International class (IPC 8-9): A47G23/04 A47J36/28 B65D81/34 (Advanced/Invention); A47G23/00 A47J36/24 B65D81/34 (Core/Invention)

International class (IPC 1-7): A47G19/00 A47G23/00 A47J36/24 A47J36/28 A47J39/02 B65D1/04 B65D81/00 B65D81/32 B65D81/34 B65D85/00 F24J1/00

CPC: A47J36/28 B65D81/3484

European class: A47J36/28 B65D81/34S

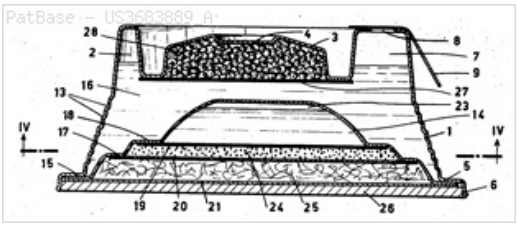
US class: 126/262 126/263 126/263.07

Classification Explorer

Cited documents: US3561424 A, US3079911 A, US2300793 A, US1850166 A, FR856079 A, AT158259 B,

Forward Citations: WO9749319, WO9011477, WO16160408, WO11014449, WO08103025, WO05118426, WO05115872, WO0240929, WO0240929, WO02088608, WO0192128, WO0165187, USRE40408, USD523285, USD522307, US9879882, US9803927, US9603483, US9598186, US9516973, US9175876, US8955676, US8783244, US8733338, US8721572, US8578926, US8561792, US8556108, US8383179, US8360048, US8001959, US7937909, US7776290, US7008656, US6903307, US6880550, US6847011, US6827080, US6639185, US6513516, US6338252, US6289889, US6248257, US5738082, US4899727, US4895135, US4771761, US4741324, US4522190, US4506654, US2012181284, US2010227027, US2010224510, US2010119657, US2009320411, US2009199843, US2009078711, US2008020103, US2008017184, US2007227919, US2007217971, US2007163569, US2007131219, US2007034202, US2006070990, US2004224057, US2004112367, US2004065315, NL1033425, JP2016185825, JP2015083498, JP2013500216, JP2008500243, FR2598070, FR2515951, EP1942064, EP1602595, EP1328763, EP1164092, EP1164092, EP0815784, EP0281342, EP0255494, EP0245171, EP0079286, EP0031523, DE102016214793,

Abstract:
Source: US3683889A A vessel has a boundary wall defining a cavity which contains a liquid. A heating insert is in heat-conducting relation with said cavity and defines a heating compartment adjoining said boundary wall and containing a heat-delivering substance which is capable of performing an exothermic reaction. An outer drinking **container** contains said vessel and insert. Said outer **container** and vessel consist of a sufficiently heat-resisting material, which consists at least in part of plastics material.



326) Family number: 40968780 (US3599859A)

Title: ARTICLES AND METHOD

Priority: US19690879039 19691124 US19710124542 19710315

Family:

Publication number	Publication date	Application number	Application date
AR196973 A1	19740308	AR19700230688	19700818
BE758391 A	19710416		00000000
BE758391 A1	19710416		00000000
BR7021214 A0	19730130	BR19700221214	19700807
CH521899 A	19720430	CH19700017470	19701124
ES197812 U	19750516	ES19700197812U	19701105
ES197812 Y	19751101	ES19700197812U	19701105
FR2072223 A5	19710924	FR19700041913	19701123
GB1303305 A	19730117	GB19700052127	19701103
US3599859 A	19710817		00000000
US3779848 A	19731218		00000000
ZA7004824 A	19710428	ZA19700004824	19700714

Probable Assignee: NCR

Assignee(s):(std)**:** NAT CASH REGISTER CO ; NCR CO ; NCR

Assignee(s): THE NATIONAL CASH REGISTER CY DAYTON OHIO E U A ; NATIONAL CASH REGISTER CY DAYTON OHIO EUA ; NATIONAL CASH REGISTER CY DAYTON OHIO E U A ; THE NATIONAL CASH REGISTER COMPANY ; NATIONAL CASH REGISTER CO THE ; NCR US ; NATIONAL CASH REGISTER ; NATIONAL CASH REGISTER CO ; EURAND AMERICA INC ; EURAND AMERICA INC A CORP OF NEV

Inventor(s):(std)**:** MAIERSON T ; MAIERSON THEODORE ; THEODORE MAIERSON

Inventor(s): T MAIERSON ; MAIERSON T US

International class (IPC 8-9): B65D77/32 (Advanced/Invention); B65D77/22 (Core/Invention)

International class (IPC 1-7): B32B31/00 B32B5/00 B65D17/20 B65D27/38 B65D5/54 B65D75/66 B65D77/00

CPC: Y10S428/905 Y10T428/15 B65D77/32 B65D2203/12 Y10T156/1052

European class: B65D77/32 L65D203/12

US class: 156/17.8 156/178 156/250 156/279 206/216 229/222 229/238 229/51AS 239/34 428/43 428/905

Classification Explorer

Cited documents: US3441353 A, US3141598 A, US2932582 A, US2907682 A, US2543181 A, US2335159 A, US2315116 A,

Forward Citations: WO8900956, WO12006328, WO08029129, WO07026260, WO07026260, WO0196189, WO0183316, US8474637, US8047362, US7798320, US7717261, US7600668, US7585824, US7294612, US7183006, US7101581, US7005152, US6951301, US6612429, US6190730, US6045833, US6006916, US5799675, US5788061, US5690130, US5582344, US5566693, US5562112, US5249676, US5035328, US5014855, US4936464, US4877139, US4865371, US4848929, US4847124, US4817860, US4723658, US2010327046, US2010193535, US2009258118, US2008026106, US2007142795, US2007087088, US2007023301, US2006287205, US2006278543, US2006278542, US2005230459, US2005199695, US2004222108, US2004185145, US2004071746, US2004048083, US2004041013, US2004028779, US2002197361, US2002190023, RU2533362, GB2276147, GB2276147, GB2221670, GB2198062, EP2744729, EP1164084, EP0483126, EP0283621, EP0257913, EP0257913, EA12457, EA012457, DE102011110634, AU2011276272,

Abstract:
Source: US3599859A This disclosure is directed to **container** **opening** structures comprising a **container** wall member, such as a **closure**, e.g., a lid, to which there is attached at least one flexible **closure** tearing means accessible from the exterior of the **container** and a plurality of pressure-rupturable capsules, each of which contains a volatilizable core material, e.g., perfume or other fragrance, located between the **container** wall or lid and the tearing means. Preferably, the tearing means is a flexible tape composed of a plurality of parallelly arranged monofilaments. The operation of the tearing means serves to rupture at least some of the capsules during **opening** of the **container**.

PatBase - US3599859_A

FIG. 1

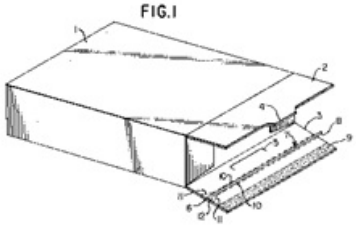


FIG. 2

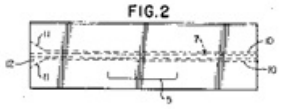
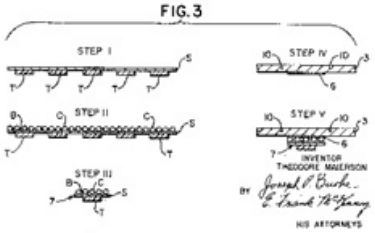


FIG. 3



INVENTOR
THEODORE MAIERSON
BY Joseph J. Burke
E. Frank McGarry
HIS ATTORNEYS

327) Family number: 30953154 (US3679088A)

Title: PRESS TYPE **CLOSURE**

Priority: US19700008228 19700203 US19700067340 19700827

Family:

Publication number	Publication date	Application number	Application date
AT309305 B	19730810	AT19710000846	19710202
BE762421 A	19710802	BE19710762421	19710202
BR7100828 A0	19730508	BR19710000828	19710203
BR7101169 A0	19730412	BR19710001169	19710219
CA942708 A1	19740226	CA19710104336	19710202
CH540831 A	19730831	CH19710001575	19710203
DE2104662 A1	19710812	DE19712104662	19710202
DE2104662 B2	19731220	DE19712104662	19710202
DE2104662 C3	19740725	DE19712104662	19710202
DK139467 B	19790226	DK19710000448	19710202
DK139467 C	19790806	DK19710000448	19710202
ES165761 U	19710501	ES19710165761U	19710203
ES165761 Y	19710916	ES19710165761U	19710203
FI52315 B	19770502	FI19710000269	19710202
FI52315 C	19770810	FI19710000269	19710202
FR2079210 A1	19711112	FR19710003407	19710202
FR2079210 B1	19750117	FR19710003407	19710202
GB1352253 A	19740508	GB19710020829	19710419
IE34928 B	19751001	IE19710000129	19710203
IE34928 L	19710803	IE19710000129	19710203
IS1985 A7	19710804	IS19710001985	19710129
IS929 B6	19760510	IS19710001985	19710129
JP51003255 B4	19760202	JP19710004192	19710207
MY7500290 A	19751231	MY19750000290	19751230
NL163997 B	19800616	NL19710001099	19710128
NL163997 C	19801117	NL19710001099	19710128
NL7101099 A	19710805	NL19710001099	19710128
NO131977 B	19750526	NO19710000338	19710201
NO131977 C	19750903	NO19710000338	19710201
OA3681 A	19711224	OA19710054154	19710201
PL81867 P	19751031	PL19710145963	19710202
SE369594 B	19740909	SE19710001240	19710202
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US3679088 A	19720725	US19700008228	19700203
US3679089 A	19720725	US19700067340	19700827
ZA7100440 A	19711027	ZA19710000440	19710122
ZM871 A	19711122	ZM19710000008	19710202

Probable Assignee: DART IND INC

Assignee(s):(std)**:** DART IND INC ; DART IND INC LOS ANGELES USA ; DART INDUSTRIES INC LOS ANGELES CALIFORNIE VER ST ; DART INDUSTRIES INC 8480 BEVERLY BOULEVARD LOS AN

Assignee(s): DART INDUSTRIES INC 8480 BEVERLY BOULEVARD LOS ANG ; CROYLE JACK V ; DART INDUSTRIES INC US ; DART INDUSTRIES INC LOS ANGELES CALIF V ST A ; DART INDUSTRIES INC 8480 BEVERLY BOULEVARD LOS ANGELES ETAT DE CALIFORNIE E U A ; DART INDUSTRIES INC LOS ANGELES CALIFORNIE VER ST V AM ; SWETT JAMES B ; DART IND INC US ; DART INDUSTRIES INC ; DART IND INC LOS ANGELES CALIF V ST A

Inventor(s):(std)**:** JB SWETT ; JV CROYLE ; SUVETT J ; SWETT J ; SWETT J B ; SWETT J US ; SWETT JAMES B ; CROYLE J ; CROYLE J US ; CROYLE J V ; CROYLE JACK V ; SWETT JAMES BALDWIN ; JAMES BALDWIN SWETT ; JACK VINCENT CROYLE ; CROYLE JACK VINCENT

Inventor(s): BALDWIN SWETT JAMES ; J V CROYLE ; J B SWETT ; CROYLE JACK VINCENT WOONSOCKET ; JACK V CROYLE ; JAMES B SWETT ; SWETT JAMES BALDWIN BARRINGTON ; VINCENT CROYLE JACK

International class (IPC 8-9): A47J47/02 B65D43/02 B65D43/06 B65D51/16 (Advanced/Invention); B65D43/02 (Core/Invention)

International class (IPC 1-7): A47G23/04 A47J47/02 B65B29/08 B65D1/00 B65D3/14 B65D39/00 B65D39/02 B65D39/04 B65D39/12 B65D41/00 B65D41/02 B65D43/00 B65D43/02 B65D43/04 B65D43/06 B65D43/10 B65D85/72

CPC: A47J47/02 B65D43/021 B65D43/0218 B65D43/022 B65D51/1694 B65D2543/00092 B65D2543/00296 B65D2543/0037 B65D2543/00509 B65D2543/00537 B65D2543/00546 B65D2543/00555 B65D2543/00629 B65D2543/00685 B65D2543/0074 B65D2543/00796

European class: A47J47/02 B65D43/02S3D B65D43/02S5B B65D43/02S5D B65D51/16E3B L65D543/00Y1F2C L65D543/00Y1M6 L65D543/00Y2F L65D543/00Y8D1C L65D543/00Y8D3 L65D543/00Y8D3N L65D543/00Y8D5 L65D543/00Y8S1B4 L65D543/00Y8S1D2 L65D543/00Y8S3B4 L65D543/00Y8S3D2

US class: 220/42C 220/42R 220/60 220/60A 220/60R 220/789 220/799 220/801 220/802 D7/391

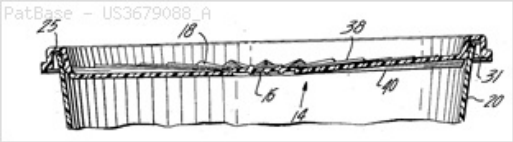
Classification Explorer

Cited documents: US3519163 A, US3380610 A, US3362575 A, US3156372 A, US3142409 A, US3070257 A, US2671574 A, US2024495 A, FR1140556 A,

Forward Citations: WO09014771, USD676275, USD652687, USD585279, USD574238, USD564354, USD560120, US9814334, US9730540, US9682799, US9622605, US9505528, US9260228, US9181009, US9114916, US9108766, US9078535, US9051089, US9038845, US8973776, US8939312, US8919592, US8870010, US8827097, US8807388, US8777049, US8714393, US8708181, US8695845, US8608017, US8596491, US8590730, US8540112, US8430268, US8403174, US8381935, US8317060, US8286826, US8074831, US7909204, US7556706, US7484639, US7318536, US7299941, US7114617, US7114617, US7055715, US6464081, US6364152, US6206196, US5839603, US5168140, US5165566, US5147059, US5027972, US4561562, US4426014, US4356930, US4279541, US4117950, US3989142, US3979015, US3895736, US3809281, US2014319143, US2013056464, US2011290817, US2011168708, US2008203092, US2008185382, US2008047965, US2008041869, US2008041867, US2008017651, US2007145060, US2006179793, US2006163099, US2006138146, US2006113313, US2005274727, US2005230406, US2005016887, US2004206765, JP57182042, FR2390343, FR2294673, EP2605979, EP0370982,

EP0242447, EP0242447, DE3904428, DE3904428, DE3624359, DE2558091, DE102011100243, DE102009055861,

Abstract:
Source: US3679088A A **closure** suitable of insertion over the **opening** of a tubular or similarly constructed member and adapted to hermetically **seal** that **opening**. The **closure** construction includes a biased center main wall that particularly adapts it for placement upon the tubular member by a light application of finger pressure to the approximate center of the main wall. Also disclosed is the method of application of such a **closure** upon a tubular member, and a combined snap-on and locking feature for this **closure**.



328) Family number: 436521 (US4212405A)

Title: Aluminum panel **container** or trailer body

Priority: US19690868772 19691023 US19720232448 19720307

Family:

Publication number	Publication date	Application number	Application date
DE2052164 A1	19710506	DE19702052164	19701023
FR2066459 A5	19710806	FR19700038358	19701023
GB1333236 A	19731010	GB19700050556	19701023
US4212405 A	19800715	US19720232448	19720307

Probable Assignee: STRICK CORP

Assignee(s):(std)**:** STRICK CORP

Inventor(s):(std)**:** SCHMIDT GEORGE A

International class (IPC 8-9): B62D29/00 B62D33/04 B65D88/12 (Advanced/Invention); B62D29/00 B62D33/00 B65D88/00 (Core/Invention)

International class (IPC 1-7): B65D6/00 B65D6/34 B65D7/00 B65D81/00 B65D88/12 B65J1/00 B65J1/02

CPC: B65D88/12 B62D29/008 B62D33/04 B65D88/121

European class: B62D29/00C B62D33/04 B65D88/12 B65D88/12A

US class: 220/1.5 220/1.500 220/653 220/668 296/182.1

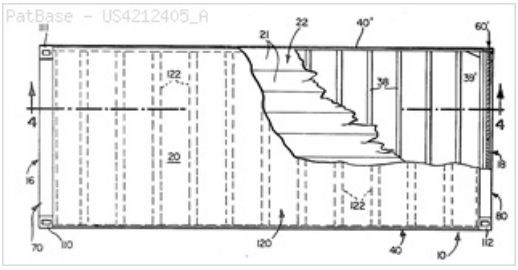
Classification Explorer

Cited documents: US3456829 A, US3085707 A, US3080096 A, US3062402 A, US3044656 A, US2715971 A,

Forward Citations: WO08028357, WO04026663, WO04026663, US9878744, US9631359, US9556632, US9487352, US9434421, US9334107, US9067729, US8857125, US8424958, US8256827, US8207265, US7931328, US7677642, US7540085, US7478865, US7410210, US7264305, US7114762, US7114762, US7100971, US7055892, US6979051, US6923493, US6907828, US6893075, US6866330, US6866329, US6793271, US6682127, US6652018, US6524410, US6497451, US5655792, US5526622, US5509714, US5474331, US5286079, US5222618, US5219629, US5030488, US4998634, US4904017, US2014352232, US2010295334, US2010259068, US2010098935, US2010088966, US2010078964, US2010019537, US2009107079, US2009001087, US2009001075, US2008211262, US2008136218, US2007284912, US2007094945, US2006170249, US2006131930, US2006087152, US2006061136, US2005242621, US2005134086, US2004256887, US2004239147, US2004232728, US2004104597, US2004061357, GB2206862, GB2199545, FR2572494, FR2549574, EP0179962, EP0043228, EP0043228,

Abstract:

Source: US4212405A A frameless cargo-carrying **container** or trailer body construction, in which at least the side walls of the **container** or trailer body and one or both end walls each consists essentially of a unitary aluminum alloy plate having a thickness of at least about 5/32'', and preferably having a tensile yield point of at least about 25,000 p.s.i. In a preferred form of the invention at least a majority of the major structural elements of the **container** or trailer body are formed of suitable aluminum alloys, and in one embodiment thereof, the **container** or trailer body includes forged aluminum alloy corner fittings, said alloy having an average percentage elongation of at least about 15 percent. The overall design of **containers** or trailer bodies of this invention is preferably such that the inner face of each side is substantially coplanar with the plate forming that side.



329) Family number: 730287 (US3578115A)

Title: UTILITY BAG

Priority: US19680769313 19681021 US19700057416 19700615

Family:

Publication number	Publication date	Application number	Application date
GB1243135 A	19710818	GB19690031302	19690620
US3578115 A	19710511	US19680769313	19681021
US3764433 A	19731009	US19700057416	19700615

Probable Assignee: RAPID AMERICAN CORP

Assignee(s):(std)**:** RAPID AMERICAN CORP

Assignee(s): RAPID AMERICAN CORP US

Inventor(s):(std)**:** SCHNEIDER M ; SCHNEIDER MARVIN

Inventor(s): SCHNEIDER M US ; MARVIN SCHNEIDER

International class (IPC 8-9): A45C3/00 B29C41/04 B29C65/00 B29C65/04 (Advanced/Invention); B29C37/00 (Advanced/Non-invention); A45C3/00 B29C41/04 B29C65/00 B29C65/04 (Core/Invention); B29C37/00 (Core/Non-invention)

International class (IPC 1-7): A45C3/00 A45C5/02 B29C17/10 B29C24/00 B29C5/04

CPC: Y10S190/903 B29C66/5326 B29C66/534 B29C65/04 A45C3/00 A45C2003/007 B29C37/0057 B29C41/04 B29C66/305 B29C66/4722 B29L2005/00 B29L2031/742 Y10T156/1028 Y10T156/1056 Y10T156/1062 B29C66/8322 B29C66/81241 B29C66/81457 B29C66/71 B29C66/8161 B29C66/61 B29C66/8242 B29C66/1122

European class: A45C3/00 B29C41/04 B29C65/04 B29C66/305 B29C66/4722 K45C3/00S L29C37/00F2 L29L31/742 L29L5/00

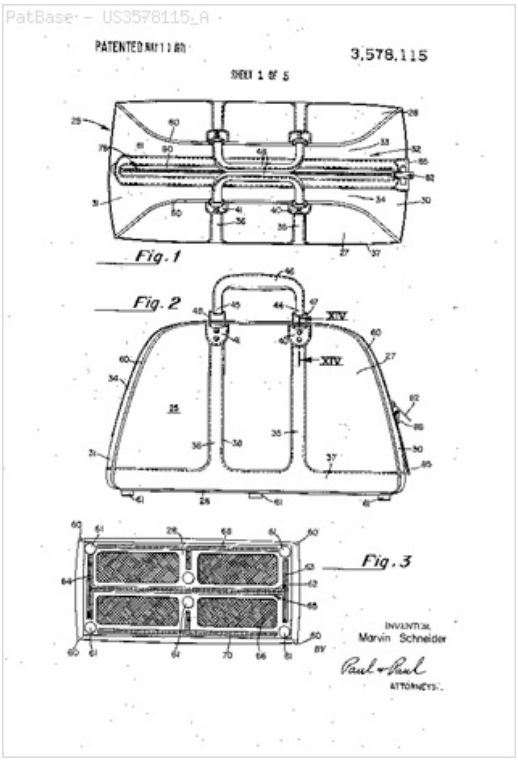
US class: 156/212 156/24.5 156/245 156/252 156/256 156/274.4 156/66 190/115 190/119 190/124 190/48 190/903 264/156 264/310

Classification Explorer

Cited documents: US3302679 A, US3280870 A, US3254688 A, US3161216 A, US2753599 A, US2681296 A, US2658543 A, US2577670 A, US2475277 A, US2471612 A, US1999064 A, GB740412 A, GB1092004 A, AU210161 A1,

Forward Citations: WO08006360, WO08006360, USD803556, USD561466, USD543028, USD475251, USD475250, USD447632, US9414658, US8382373, US7819279, US7204388, US6003646, US5676295, US4714143, US4039103, US3685620, US2007095848, US2006232111, US2004031795, ITNA20120026, ITNA20120025, FR2702989, EP2868224, EP0597351, EP0597351, EP0350570, EP0350570, CN104585999,

Abstract:
Source: US3578115A A general utility bag is provided, major components of which are rotationally cast or molded, as an integral monolithic unit, with bottom and closure units being secured thereto by radio frequency heat sealing and wherein other heat sealing operations may be of the radio frequency type. Detail, trim and graining along with simulated stitching is provided as part of the integral molding or casting operation to give the general appearance of a bag constructed of multiple components. Handles are then attached to the bag.



330) Family number: 503723 (GB1288514A)

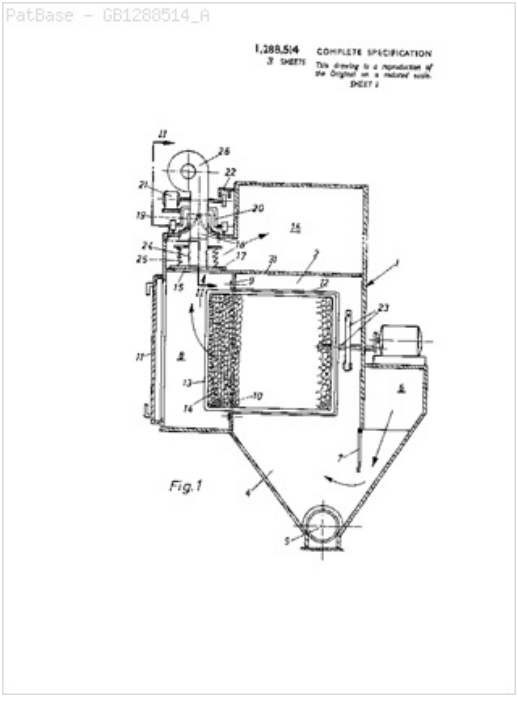
Title:	TASCHENFILTER MIT EINEM MEHRKAMMERGEHAEUSE **BAG** FILTER WITH A MEHRKAMMERGEHAEUSE (Machine translation)
Priority:	DE19691947737 19690920 DE19702017475 19700411 DE19702017720 19700414

Family:

Publication number	Publication date	Application number	Application date
DE1947737 A1	19710527	DE19691947737	19690920
DE2017475 A1	19711111	DE19702017475	19700411
DE2017475 B2	19740815	DE19702017475	19700411
DE2017720 A1	19720120	DE19702017720	19700414
DE2017720 B2	19730315	DE19702017720	19700414
DE2017720 C3	19731004	DE19702017720	19700414
ES383685 A1	19730301	ES19700383685	19700916
FR2062386 A5	19710625	FR19700034020	19700918
GB1288514 A	19720913		19700921

Probable Assignee:	LUEHR STAUBTECH
Assignee(s):(std)**:**	LUEHR STAUBTECH ; LUHR HEINRICH VDI STAUBT ; LUHR VDI STAUBTECHNIK
Assignee(s):	HEINRICH LUEHR VDI STAUBTECHNIK FA ; FA HEINRICH LUEHR VDI STAUBTECHNIK ; HEINRICH LUEHR VDI STAUBTECHNIK 4960 STADTHAGEN
Inventor(s):(std)**:**	MARGRAF ADOLF DIPL ING ; MARKGRAF ADOLF DIPL ING
Inventor(s):	MARKGRAF ADOLF DIPL ING 4961 WENDTHAGEN ; MARGRAF ADOLF DIPL ING 4961 WENDTHAGEN
International class (IPC 8-9):	B01D46/00 B01D46/04 B01D50/00 (Advanced/Invention); B01D46/00 B01D46/04 B01D50/00 (Core/Invention)
International class (IPC 1-7):	B01D35/00 B01D46/00 B01D46/04 B01D46/06
CPC:	B01D46/0058 B01D46/0068 B01D46/0075 B01D46/04 B01D50/002 B01D2201/313
European class:	B01D46/00R10 B01D46/00R40A B01D46/00R50V B01D46/04 B01D46/04P B01D50/00B L01D201/31P
Classification Explorer	
Forward Citations:	WO9801209, DE2617355, DE2433514, DE2262084, CN103657316, CN103657316,

Abstract:
Source: GB1288514A 1288514 Gas filter HEINRICH LUHR VDI STAUBTECHNIK 21 Sept 1970 [20 Sept 1969 11 April 1970 14 April 1970] 44923/70 Heading BIT A gas filtering apparatus comprises a housing 1 having therein a plurality of aligned dirty-gas compartments 2 separated by walls 3 (Fig. 2 not shown), each dirty gas compartment having an associated clean-gas compartment 8 separated therefrom by a wall 9 having vertical slits 10 therein. The clean-gas compartments are connected by **openings** 15 to a common clean gas duct 16. The clean-gas and dirty gas compartments are separated by filter **bags** 12 arranged over frames 13 and fitted around the periphery of the slits 10. The **bags** may be mechanically shaken by shaker 23. Dirty gas enters each compartment 2 from 6 via closable flap 7. Separated dust falls to the hopper 4 and is removed via screw conveyor 5. The **openings** 15 in each clean-gas compartment may be closed for cleaning of the appropriate filter **bags** by a movable **closure** plate 17 which is attached to a hollow support tube 18 which passes through and out of the top of the clean gas duct through a slot extending longitudinally above the clean-gas compartments. The tube 18 is connected to a source 26 of reverse flow cleaning gas. The support tube and **closure** plate are moved back and forward above the clean gas compartments on trolley 20. Three methods are described of **sealing** the **closure** plate 17 against the **opening** 15. In the embodiment of Fig. 1, the bottom portion 24 of the tube is resilient and the **closure** plate is forced downwards by springs 25. In Fig. 3 (not shown), the **closure** plate (32) is downwardly flanged and spaced above the **opening** 15. An inflatable annular air cushion (33) fills the space between the **closure** plate and the periphery of the **opening**, this air cushion being inflated to form the **seal**. In Figs. 4 and 5 (not shown), a flat **closure** plate (38) which is spaced above the **opening** 15 has electromagnets (40) arranged around its periphery and the periphery of the **opening** 15 has energising armatures (41) arranged therearound, so that as the **closure** plate passes over the **opening** the electromagnets and hence its edges are attracted downwards to the periphery of the **opening** to form the **seal**.



331) Family number: 954092 (US3581461A)

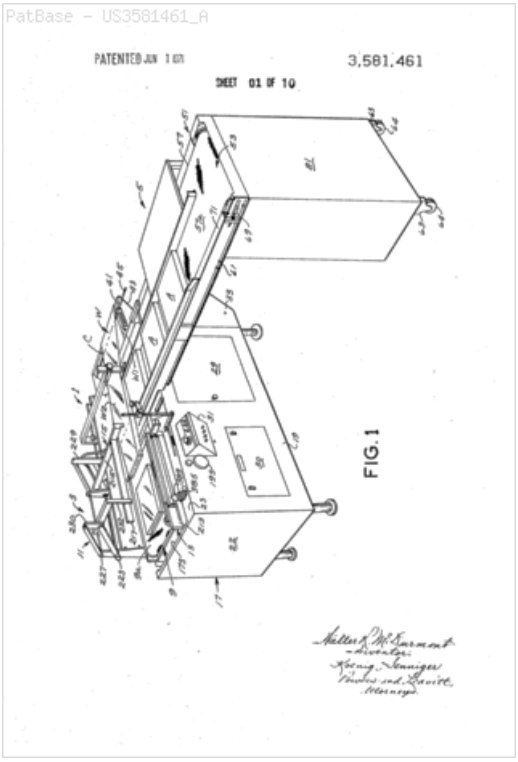
Title:	**PACKAGING** APPARATUS
Priority:	US19690820208 19690429

Family:

Publication number	Publication date	Application number	Application date
US3581461 A	19710601	US19690820208	19690429

Probable Assignee:	APV ANDERSON BROS INC
Assignee(s):(std):	SOUTH STEEL CORP
Assignee(s):	ANDERSON BROS MFG CO ; ANDERSON BROS MFG CO A DE CORP ; APV ANDERSON BROS INC
Inventor(s):(std):	MCDURMONT WALTER R
Inventor(s):	WALTER R MCDURMONT
International class (IPC 8-9):	B65B9/06 (Advanced/Invention); B65B9/06 (Core/Invention)
International class (IPC 1-7):	B65B61/10 B65B9/06
CPC:	B65B9/06
European class:	B65B9/06
US class:	53/182 53/568 53/77
Classification Explorer	
Cited documents:	US3496700 A, US3429100 A, US3427781 A, US3302369 A, US3209513 A,
Forward Citations:	US4548018, US4519185, US4185443, US4035983, EP1044881,

Abstract:
Source: US3581461A (Claim 1) 1. **Packaging** apparatus wherein articles are entered at a loading station in a web of flexible heat-**sealable** sheet **packaging** material having two opposed walls joined along one longitudinal margin thereof and **open** along the other, an article being entered into the web laterally between said walls through the **open** margin, and the web, with an article therein, being fed from the loading station to an adjacent **sealing** station where the walls of the web are **sealed** longitudinally along its **open** margin and severed on a line trailing the article and **sealed** on both sides of said line to form a trailing transverse **seal** for a **package** being formed at the **sealing** station and a leading transverse **seal** for the next **package** to be formed at the **sealing**, said apparatus comprising entry means at the loading station for generally horizontal entry of an article in the web at a predetermined entry level, one wall of the web passing under and the other passing over said entry means, means at the **sealing** station for effecting said **sealing** and severing of the web comprising a pair of **sealers** relatively movable toward and away from one another between an **open** and a closed position for forming the **seals** at a predetermined **sealing** level, elevator means for supporting the web and an article therein at the **sealing** station, the elevator means being movable between a raised position generally at said entry level for generally horizontal feed of the web with an article therein from the entry means to the elevator means and a lowered **sealing** position below said entry level for formation of the **seals** in a generally horizontal plane between the top and bottom of the article, power-operated means for actuating the **sealing** means, and power-operated means operable on actuation of the **sealing** means for lowering the elevator means to its **sealing** position for the **sealing** and severing of the web and returning the elevator means to its raised position on **opening** of the **sealing** means, the elevator means including an outfeed conveyor for feeding a **sealed** **package** out of the **sealing** station when the elevator means is in its raised position.



332) Family number: 1328612 (US3743170A)

Title: CONVERTIBLE **PACKAGE**

Priority: US19690830938 19690606 US19700094079 19701201

Family:

Publication number	Publication date	Application number	Application date
CA961010 A1	19750114	CA19710127016	19711105
US3581975 A	19710601	US19690830938	19690606
US3743170 A	19730703	US19700094079	19701201

Probable Assignee: CONSOLIDATED INT CHE

Assignee(s):(std)**:** CONSOLIDATED INT CHE ; CONSOLIDATED INTERNATIONAL CHE ; GUERIN KATHERINE D

Assignee(s): CONSOLIDATED INTERNATIONAL CHEM CO INC US ; CONSOLIDATED INTERNATIONAL CHEMICAL CO INC ; CONSOLIDATED INT CHEM CO INC US

Inventor(s):(std)**:** GUERIN KATHERINE D ; RICCIO K ; RICCIO KATHERINE DELIA

Inventor(s): RICCIO K US ; KATHERINE DELIA RICCIO

International class (IPC 8-9): B65D5/355 B65D5/66 (Advanced/Invention); B65D5/00 B65D5/64 (Core/Invention)

International class (IPC 1-7): A01K67/00 B65D5/08 B65D5/22 B65D5/66

CPC: B65D5/6626 A01K1/0125 A01K1/0353 B65D5/0005 B65D5/6673

European class: B65D5/00A B65D5/66D B65D5/66D3

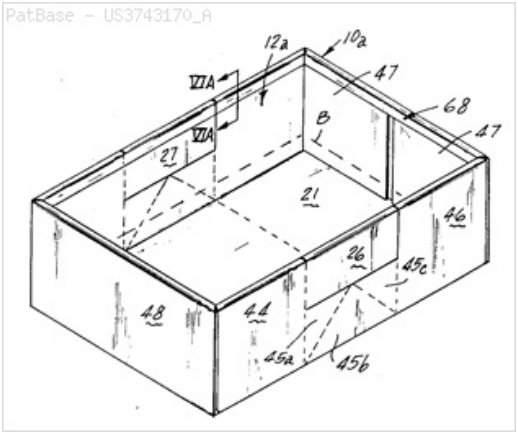
US class: 119/161 119/165 119/168 119/173 229/101 229/123.3 229/144 229/145 229/147 229/151 229/186 229/190 229/3.3 229/33

Classification Explorer

Cited documents: US3377990 A, US3170618 A, US3154052 A, US2100644 A, US2037839 A, US1793102 A, US1425713 A, US1021874 A, CA716436 A,

Forward Citations: USRE31435, US8869744, US7082892, US6793071, US6382131, US6257834, US5645212, US5396864, US5144914, US5060849, US5007530, US4890576, US4807564, US4800842, US4791883, US4779567, US4739725, US4712726, US4628863, US4514961, US4452367, US4441451, US4271787, US4244508, US4164314, US3886901, US2012186527, US2005274049, US2004244708, GB2210602, GB2210602, AU587453,

Abstract:
Source: US3743170A A **box** or carton having a compact closed product **storage** position which is easily unfolded into an enlarged tray or pan position with hinged side wall portions providing struts to maintain the **opened** pan or tray position and to serve as a gate providing access to the interior of the tray or pan. In the closed position, the **box** or carton is a small six-sided, **sealed** **package** preferably housing a **bag** of absorbent ground clay. In the **open** tray or pan position, the **box** or carton has a flat bottom and relatively high side and end walls so that when the clay is spread over the bottom, it will provide a bed or substantially less thickness than the height of the side and end walls and serving as a commode for small house pets, such as cats and the like.



333) Family number: 19222012 (US4041851A)

© PatBase

Title: METHOD FOR MAKING PLASTIC **BAGS**

Priority:

AT19710008212 19710922	AT19730001676 19730226	DE19710012470U 19710401
AT19740002555 19740327	DE19702028693 19700611	DE19712115315 19710330
US19710151320 19710609	DE19712115350 19710330	DE19717112470U 19710401
GB19740006839 19710609	GB19740006838 19710609	

Family:

Publication number	Publication date	Application number	Application date
AR192887 A1	19730321	AR19710237537	19710824
AT167673 A	19760215	AT19730001676	19730226
AT255574 A	19760215	AT19740002555	19740327
AT321089 B	19750310	AT19710008212	19710922
AT333113 B	19761110	AT19730001676	19730226
AT333114 B	19761110	AT19740002555	19740327
BE768179 A	19711103	BE19710768179	19710607
BR7105690 A0	19730426	BR19710005690	19710830
CA992921 A1	19760713	CA19710115020	19710607
CH525075 A	19720715	CH19710008449	19710610
DE2028693 A1	19711223	DE19702028693	19700611
DE2028693 B2	19741121	DE19702028693	19700611
DE2028693 C3	19800918	DE19702028693	19700611
DE7112470 U	19710701	DE1971012470U	19710401
ES171240 U	19711216	ES19710171240U	19710728
ES171240 Y	19730316	ES19710171240U	19710728
ES392086 A1	19740816	ES19710392086	19710609
FR2097845 A5	19720303	FR19710020879	19710609
GB1365308 A	19740829	GB19710019631	19710609
GB1365309 A	19740829	GB19740006838	19710609
GB1365310 A	19740829	GB19740006839	19710609
SE385813 B	19760726	SE19710007391	19710608
SE385813 C	19761104	SE19710007391	19710608
US4041851 A	19770816	US19730361665	19730518
YU139471 A	19840831	YU19710001394	19710531

Probable Assignee: JENCO VERPACKUNGEN JENTSCH AND CO 4300 ESSEN KG

Assignee(s):(std)**:** JENTSCH H DT ; JENCO VERPACKUNGEN JENTSCH CO ; JENTSCH G ; JENTSCH H G ; G JENTSCH HANS ; JENTSCH H ; JENTSCH HANS G DAIMLER STRASSE 4 43 ESSEN ALLEMA ; SENTSCH H ; JENTSCH HANS G ; JENTSCH HANS

Assignee(s): JENTSCH HANS G 4300 ESSEN ; G JENTSCH ; JENTSCH HANS G DAIMLER STRASSE 4 43 ESSEN ALLEMAG ; JENTSCH HANS G DAIMLER STRASSE 4 43 ESSEN ALLEMAGNE ; JENCO VERPACKUNGEN JENTSCH AND CO KG ; JENTSCH AND CO KG ; HANS G JENTSCH ; JENCO VERPACKUNGEN JENTSCH AND CO 4300 ESSEN KG ; JENCO VERPACKUNGEN JENTSCH AND CO KG 4300 ESSEN

Inventor(s):(std)**:** HANS G JENTSCH ; JENTSCH H G ; JENTSCH HANS G ; JENTSCH HG ; SENTSCH H

Inventor(s): G JENTSCH HANS ; NCHTNENNUNG BEANTRAG ; NICHTNENNUNG BEANTRAGT

International class (IPC 8-9): B29C65/00 B31B19/64 B31B29/00 B31B3/28 B31B31/60 B65D75/00 B65D75/58 (Advanced/Invention); B29C65/00 B31B19/00 B31B29/00 B31B3/00 B31B31/00 B65D75/00 B65D75/52 (Core/Invention); B31B B65D (Subclass/Invention)

International class (IPC 1-7): B29C24/00 B31B29/00 B31B29/60 B31B31/00 B31B31/60 B31B35/00 B31B37/00 B31B49/04 B65D1/26 B65D30/16 B65D31/00 B65D31/06 B65D33/00 B65D77/12

CPC: Y10S493/936 B29C66/1122 B29C66/346 B29L2031/7128 B65D75/008 B65D75/5866 B29C66/4326 B29C65/02 B29C66/431 B31B2150/00 B31B2160/20 B31B70/64 B29C66/723 B31B70/00 B31B2160/10

European class: B29C66/1122 B29C66/346 B31B19/64 B31B29/00 B65D75/00E B65D75/58G1 L29L31/7128 L31B219/60C L31B221/20

US class: 383/107 383/121 383/122 383/200 493/200 493/218 493/232 493/936 93/35SB

Classification Explorer

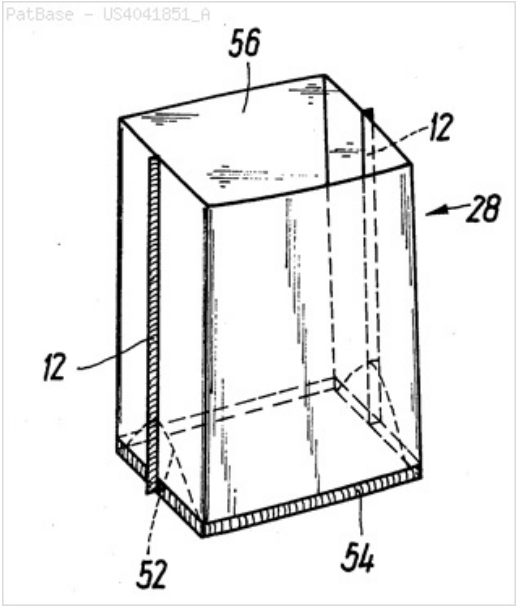
Cited documents: US3654841 A, US3431829 A, US3412918 A, US3380646 A, US3334553 A, US3006257 A,

Forward Citations: WO9964307, WO9908862, WO9611859, WO9500403, WO07112898, USD788582, USD787319, USD784127, USD781702, USD778719, USD777026, USD772069, USD768479, USD766082, USD764914, USD761651, USD756219, USD754534, USD753996, USD753995, USD750477, USD748471, USD747646, USD747202, USD747195, USD747189, USD746673, USD740114, USD739232, USD734144, USD733549, USD730725, USD726535, USD725467, USD715643, US9850036, US9745104, US9573737, US9307861, US9162786, US8668387, US8616426, US8602244, US8602242, US8550712, US8528765, US7780004, US6921204, US6783277, US6539692, US6443309, US6428456, US6341895, US6261215, US6231237, US6195965, US6178724, US6164042, US6126315, US6112928, US6095687, US5843540, US5800062, US5772332, US5761884, US5743405, US5695287, US5645169, US5378065, US5350240, US5241150, US5112138, US5016755, US4883695, US4877336, US4829741, US4649696, US4526565, US4406646, US4358466, US4353497, US2016304254, US2012298663, US2012230615, US2010308096, US2010140129, US2007164035, US2007092398, US2007051650, US2005115934, US2003053723, US2003051442, US2002139084, JP56004528, FR2674825, FR2417440, EP1842784, EP1474335, EP0681970, DE3008809, DE19507444, CZ306220, AU759885,

Abstract:

Source: US4041851A The invention provides a novel method of making a plastics **bag** and a novel plastics **bag**, the method comprising folding a sheet of plastics material to form a U-shaped blank, welding the longitudinal edges of the blank, and providing either two or four weld seams at the base of the **bag** to provide a bottom wall defined at least in part by said seams, said seams serving to give the **bag** stability whereby it may be stood on said bottom wall. The top of the **bag** may be closed in various ways, for example by straight or inclined weld seams and a funnel like pouring spout may be provided if desired.

PatBase - US4041851_A



334) Family number: 113914 (US3754372A)

© PatBase

Title: APPARATUS FOR MAKING THERMOPLASTIC VACUUM **PACKAGES**

Priority: US19700009580 19700209 US19710192583 19711026

Family:

Publication number	Publication date	Application number	Application date
AU197125095 A1	19720810	AU19710025095	19710205
BE762011 A	19710701	BE19710762011	19710125
BR7100872 A0	19730503	BR19710000872	19710208
CA926760 A1	19730522	CA19700091236	19700820
CH527092 A	19720831	CH19710001194	19710127
DE2102890 A1	19710826	DE19712102890	19710122
FR2079331 A1	19711112	FR19710004172	19710208
FR2079331 B1	19750822	FR19710004172	19710208
GB1296013 A	19721115		19710104
NL167916 B	19810916	NL19710001687	19710209
NL167916 C	19820216	NL19710001687	19710209
NL7101687 A	19710811	NL19710001687	19710209
US3754372 A	19730828	US19710192583	19711026
ZA7100193 A	19720426	ZA19710000193	19710112

Probable Assignee: WR GRACE AND CO

Assignee(s):(std)**:** GRACE W R AND CO ; GRACE W R LTD

Assignee(s): WR GRACE AND CO ; W R GRACE AND CO ; W R GRACE AND CO 3 HANOVER SQUARE NEW YORK 4 N Y ; W R GRACE AND CO TE NEW YORK ; W R GRACE AND CO 3 HANOVER SQUARE NEW YORK 4 N Y E U A ; RICHARD R PERDUE ; GRACE W R AND CO US ; GRACE AND CO ; GRACE AND CO US ; GRACE W AND CO

Inventor(s):(std)**:** PERDUE R ; PERDUE R R ; PERDUE RICHARD RUSSELL ; RICHARD RUSSELL PERDUE

Inventor(s): RR PERDUE ; RUSSELL PERDUE RICHARD ; R R PERDUE ; RICHARD R PERDUE ; PERDUE R US

International class (IPC 8-9): B65B11/52 B65B31/02 B65D81/20 (Advanced/Invention); B65B11/50 B65B31/02 B65D81/20 (Core/Invention)

International class (IPC 1-7): B31B43/00 B65B B65B11/52 B65B31/00 B65B31/02 B65D6/00 B65D75/30

CPC: B65B11/52 B65B31/021 B65D81/2015 B65D81/2023

European class: B65B11/52 B65B31/02C B65D81/20B1 B65D81/20B2

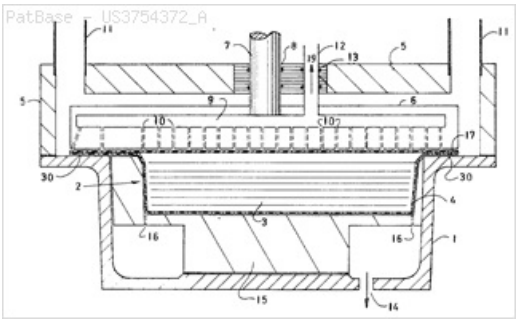
US class: 53/11.2R 53/511 53/559

Classification Explorer

Cited documents: US3522687 A, US3481100 A, US3353325 A, FR1534586 A,

Forward Citations: WO8503487, WO16182831, WO12061507, US8402723, US7665281, US7631757, US7159324, US6886690, US6648140, US6499595, US6413599, US6216419, US6186051, US5076436, US5027578, US4833862, US4688369, US4495749, US4229927, US4201030, US4085565, US3972155, US2014331611, US2011024439, US2010024359, US2010011718, US2009272073, US2009007524, US2009000252, US2007138192, US2007012708, US2003196412, NL1001550, JP53104387, GB2130166, FR2740434, FR2563814, FR2482926, FR2401849, EP1437301, EP0957042, EP0957042, EP0771738, DE3903280, DE3404451, DE2837127, DE2808836, DE2713896, DE2536020, DE102011015561,

Abstract:
Source: US3754372A A vacuum **package** is prepared by placing a product between two webs at least one of which is heat softenable, applying differential air pressure to draw the heat softenable web against a heated surface, evacuating the space between the webs, and then releasing the web and using air or gas pressure to drive the softened web onto the product and at the same time contact the other web around the periphery of the product, thus enabling the two webs to be **sealed** together. A heated platen having vacuum ports therein is used to apply suction and heat to the softenable web. In the resulting **package** the heated web conforms closely to the shape of the product it contacts.



335) Family number: 19204817 (US3685739A)

Title: LIQUID **DISPENSING** APPARATUS

Priority: US19700061936 19700807

Family:

Publication number	Publication date	Application number	Application date
BE761441 A	19710712	BE19710761441	19710111
CA961814 A1	19750128	CA19700099666	19701202
DE2101445 A1	19720210	DE19712101445	19710113
DE2101445 B2	19790607	DE19712101445	19710113
DE2101445 C3	19800207	DE19712101445	19710113
ES199316 U	19751101	ES19710199316U	19710111
ES199316 Y	19760216	ES19710199316U	19710111
FR2101356 A5	19720331	FR19710000690	19710111
GB1315866 A	19730502	GB19700058165	19701208
IL35805 A0	19710225	IL19700035805	19701207
IL35805 A1	19730228	IL19700035805	19701207
JP51045083 B4	19761202	JP19700123212	19701230
NL165952 B	19810115	NL19710001403	19710203
NL165952 C	19810615	NL19710001403	19710203
NL7101403 A	19720209	NL19710001403	19710203
NL8101019 A	19810803	NL19810001019	19810303
SE380447 B	19751110	SE19700016564	19701208
SE380447 C	19760219	SE19700016564	19701208
US3685739 A	19720822	US19700061936	19700807
ZA7008251 A	19720726	ZA19700008251	19701207

Probable Assignee: AFA CORP

Assignee(s):(std)**:** AFA CORP OF FLORIDA ; AFA CORP OF FLORIDA 14201 NORTHWEST 60TH AVENU ; AFA OF FLORIDA TE MIAMI FLORIDA VE CORP ; AFA OF FLORIDA CORP ; AFA OF FLORIDA MIAMI FLORIDA VER S CORP ; AFA CORP

Assignee(s): AFA CORP MIAMI LAKES FLA V ST A ; AFA OF FLORIDA MIAMI FLORIDA VER ST V AM CORP ; AFA OF FLORIDA TE MIAMI FLORIDA VER ST V AM CORP ; VANIER VANCE R ; AFA OF FLORIDA THE CORP ; AFA CORP OF FLORIDA 14201 NORTHWEST 60TH AVENUE MIAMI LAKES ETAT DE FLORIDE E U A ; AFA CORP OF FLORIDA 14201 NORTHWEST 60TH AVENUE MIAMI LAKES ETAT DE FLORIDE EUA ; WALTER E HELLER AND CO INC

Inventor(s):(std)**:** VANIER V ; VANIER V R ; VANIER VANCE R ; VR VANIER

Inventor(s): V R VANIER ; VANCE R VANIER

Agent(s): REINHOLD COHN AND PARTNERS

International class (IPC 8-9): B05B1/12 B05B1/34 B05B11/00 (Advanced/Invention); B05B1/00 B05B1/34 B05B11/00 (Core/Invention)

International class (IPC 1-7): A61M11/02 B05B1/00 B05B1/12 B05B11/00 B05B7/12 B05B7/32 B05B9/043 B05B9/043 B05C5/02 B65D83/14 B67D1/04 B67D5/00 B67D5/04 F04B19/00 F04B21/02 F04B9/00

CPC: F04B9/00 B05B11/0029 B05B1/12 B05B1/3436 B05B1/3452 B05B11/0018 B05B11/0064 B05B11/3011

European class: B05B1/12 B05B1/34A3B4B B05B1/34A3B4H B05B11/00B2B B05B11/00B3D B05B11/00B9L B05B11/00P3L2 B05B11/30C5B L05B1/34A3B4Y10

US class: 222/383 222/383.1 239/333 239/571

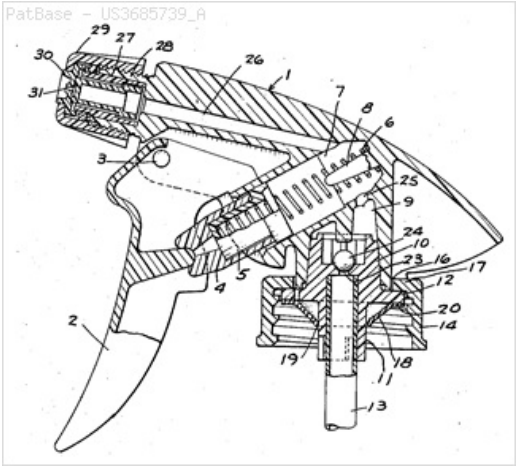
Classification Explorer

Cited documents: US3474936 A, US3176883 A, US3061202 A, US3033428 A, US2886219 A,

Forward Citations: WO9302805, WO14138421, USD570214, US9839927, US9776772, US8517221, US6886718, US6851625, US6769573, US6666357, US6637626, US6244804, US5871126, US5823400, US5657910, US5513800, US5507418, US5226600, US4940186, US4527741, US4519527, US4365751, US4358057, US4345718, US4313569, US4313568, US4310107, US4273290, US4260079, US4235353, US4227650, US4220285, US4168788, US4161288, US4109869, US4082223, US4057176, US3927834, US3840157, US3797749, US3770206, US3768734, US3762647, US2014110439, US2010140299, US2007158365, US2004217134, US2003150881, JP54058384, JP50128110, JP2008200571, FR2530497, FR2458481, FR2430896, FR2418032, FR2366878, FR2197659, FR2197659, EP0764589, EP0098508, EP0061233, EP0040852, EP0040851, EP0040850, EP0032541, EP0020840, DE3733523, DE3314020, DE3210819, DE3001687, DE2849034, DE2760352, DE2760216, DE2744654, DE2705071, DE2649326, DE2649007, DE2558645,

Abstract:
Source: US3685739A A combined **closure** and liquid pumping device for a **container** having a cap adapted to screw onto a threaded spout of the **container** The **closure** also includes a pump mechanism having a nozzle connected by a liquid conduit to an inlet within the **container**. The pump has inlet and outlet check valves in the conduit and a pump chamber connected to the conduit between the valves. The outlet valve is located between the pump and the outlet orifice of the nozzle inwardly or upstream from the nozzle orifice. The nozzle is adjustable on the body of the device and in one adjusted position positively holds the outlet valve closed so that the outlet valve closes off the conduit for disabling liquid pumping operation of the pump and also serves as a static **seal** to prevent leakage from the **container** via the liquid conduit. In another adjusted position of the nozzle the outlet valve is free to function as a check valve in the conduit which closes the conduit during the intake stroke of the pump and **opens** during the ejection stroke of the pump to pass liquid from the conduit through said orifice. The pumping device is also provided with a check valve which permits admission of air through a vent into the **container** above the liquid during the intake stroke of the pump but closes the vent at all other times to prevent leakage of the liquid from the **container** through the vent.

PatBase - US3685739_A



336) Family number: 25626280 (US3799820A)

Title: PROCESS OF MANUFACTURING **OPEN** OR CLOSED **PACKAGINGS** OF FOAM PLASTICS,PREFERABLY FOAM POLYSTYRENE

Priority: BE19710762768 19710210 DK19710000597 19710210 DK19710003899 19710810
SE19700001754 19700211 SE19700001754 19710210 US19710114266 19710210
US19720218728 19720118 SE19710009960 19710804

Family:

Publication number	Publication date	Application number	Application date
AT113971 A	19781115	AT19710001139	19710210
AT350787 B	19790625	AT19710001139	19710210
AT356371 B	19800425	AT19720006724	19720726
AT672472 A	19790915	AT19720006724	19720726
AU197125296 A1	19720817	AU19710025296	19710210
BE762768 A	19710716	BE19710762768	19710210
BE787127 A4	19721201	BE19720787127	19720803
BE787127 R	19721201	BE19720787127	19720803
BR7100921 A0	19730503	BR19710000921	19710210
CA962818 A1	19750218	CA19710105036	19710210
CH519387 A	19720229	CH19710001952	19710210
CH548838 A	19740515	CH19720011448	19720802
CS197340 B2	19800430	CS19710000990	19710210
DD98876 A	00000000	DD19720164847	00000000
DD98876 W	19730712	DD19720164847	19720803
DE2105966 A1	19710909	DE19712105966	19710209
DE2105966 B2	19720928	DE19712105966	19710209
DE2105966 C3	19730809	DE19712105966	19710209
DE2235542 A1	19730222	DE19722235542	19720720
DE2235542 B2	19760708	DE19722235542	19720720
DE2235542 C3	19770303	DE19722235542	19720720
DK128722 B	19740624	DK19710000597	19710210
DK133969 B	19760823	DK19710003899	19710810
DK133969 C	19770131	DK19710003899	19710810
ES388132 A1	19740216	ES19710388132	19710210
ES405474 A2	19750816	ES19720405474	19720803
FI48903 B	19741031	FI19710000366	19710210
FI48903 C	19750210	FI19710000366	19710210
FR2078436 A5	19711105	FR19710004457	19710210
FR2149874 A6	19730330	FR19720028041	19720803
GB1315472 A	19730502	GB19710021408	19710419
GB1337556 A	19731114	GB19720032237	19720710
IL36175 A0	19710428	IL19710036175	19710211
IL36175 A1	19740516	IL19710036175	19710211
IT1006040 A	19760930	IT19720027861	19720803
JP51015474 B4	19760517	JP19710005938	19710210
JP53024865 B4	19780724	JP19720074040	19720724
NL151294 B	19761115	NL19710001782	19710210
NL7101782 A	19710813	NL19710001782	19710210
NL7210761 A	19730206	NL19720010761	19720804
PL82791 P	19751031	PL19710146112	19710209
SE342575 B	19720214	SE19700001754	19700211
SE361429 B	19731105	SE19710009960	19710804
US3799820 A	19740326	US19720218728	19720118
ZA7100648 A	19711027	ZA19710000648	19710202

Probable Assignee: SOLLERUD SOREN E M

Assignee(s):(std)**:** ELOF MAURITZ SOLLERUD ; MAURITZ SOLLERUD ; SOEREN ELOF MAURITZ SOLLERUD ; SOEREN ELOF MAURITZ SOLLERUD NORKOEPING ZWEDEN ; SOLLERUD S ; SOLLERUD S E ; SOLLERUD S E M ; SOLLERUD S E M SW ; SOLLERUD S SW ; SOLLERUD SOEREN E ; SOLLERUD SOREN E M ; SOLLERUD SOEREN ELOF MARITZ IN ; SOLLERUD SOEREN ELOF MAURITZ I ; SOLLERUD SOEREN ELOF MAURITZ ; SOREN ELOF MAURITZ SOLLERUD ; SOLLERUD SOEREN ELOF MARITZ ING ; SOLLERUD SOREN ; SOLLERUD SOREN E M SOLVIKSGATAN 26 603 64 NORRKOP ; SOLLERUD SOEREN ELOF MAURITZ ING ; SOLLERUD SOEREN E SE ; SOLLERUD SOREN E M SOLVIKSGATEN 26 603 64 NORRKOP ; SOREN ELOF MAURITZ SOLLERUD SW ; SOLLERUD SOEREN ELOF MAURITZ NORRKOEPING SCHWEDEN ; SOLLERUD SOREN ELOF MAURITZ ; SOLLERUD SOEREN E M

Assignee(s): SOLLERUD SOREN E M SOLVIKSGATAN 26 603 64 NORRKOPING SUEDE ; SOLLERUD SOREN E M SOLVIKSGATEN 26 603 64 NORRKOPING SUEDE ; SOLLERUD SOEREN ELOF MAURITZ NORRKOEPING (SCHWEDEN) ; SOLLERUD SOREN EM ; SOLLERUD SOEREN EM ; SOREN ELOF MAURITZ BOLLERUD ; SOLLERUD SOREN E M SOLVIKSGATAN 26 603 64 NORRKOPI ; SOLLERUD SOREN E M SOLVIKSGATEN 26 603 64 NORRKOPI

Inventor(s):(std)**:** SOLLERUD SOEREN ELOF MAURITZ ; SOLLERUD SOEREN E M ; SOLLERUD SOEREN E ; SOLLERUD S SW ; SOLLERUD S OREN E M ; SOLLERUD S E M SW ; SOLLERUD S ; SOREN ELOF MAURITZ SOLLERUD ; SOLLERUD S E M ; SOREN ELOF MAURITZ SOLLERUD SW ; SOLLERUD SOEREN ELOF MAURITZ NORRKOEPING ; ELOF MAURITZ SOLLERUD SOREN

Inventor(s): SOLLERUD SOREN EM ; SOLLERUD SOEREN ELOF MAURITZ NORRKOEPING SCHWEDEN ; SOLLERUD SOEREN EM ; SOREN ELOF MAURITZ BOLLERUD ; SOEREN ELOF MAURITZ SOLLERUD ; MAURITZ SOLLERUD SOREN ELOF

Agent(s): EITAN PEARL LATZER AND COHEN ZEDEK

International class (IPC 8-9): B29C53/42 B29C65/00 B29C65/20 B65B51/09 B65B51/10 B65D6/32 (Advanced/Invention);
B29C53/36 (Advanced/Non-invention);
B29C53/00 B29C65/00 B29C65/18 B65B51/09 B65B51/10 (Core/Invention)

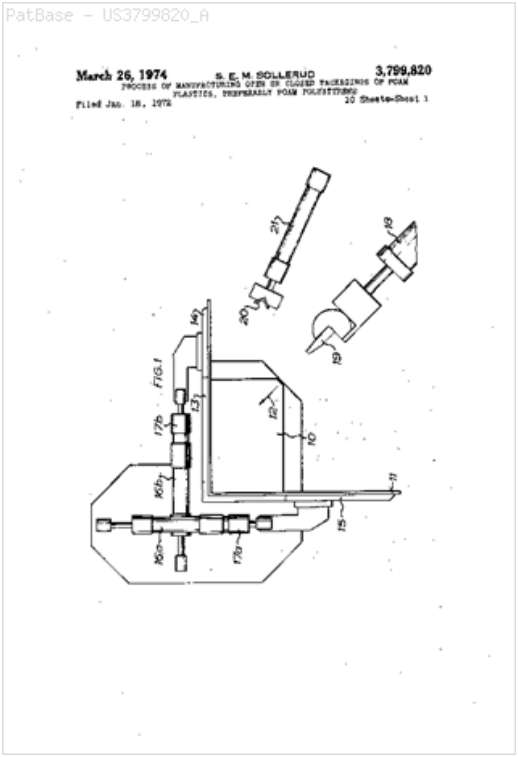
International class (IPC 1-7): B29C1/16 B29C24/00 B29C27/00 B29C27/02 B29C27/06 B29D27/00 B31B1/00 B31B1/64 B31B17/00 B65B51/10 B65B7/16 B65B7/28 B65D1/40 B65D11/00 B65D11/10 B65D17/28 B65D5/02 B65D5/12

	B65D5/14 B65D5/70 B65D65/00 B65D65/44
CPC:	B29C65/2069 B29C65/2061 B29C65/203 B29C66/49 B29C65/7847 B29C66/53461 B29C65/568 B29C66/81427 B29C66/81431 B29C53/36 B29C66/223 B29C66/81435 B65B51/10 B29C53/42 B29C66/727 B29K2105/04 Y10T156/1033 Y10T156/1038 B29C66/8322 B29C66/4326 B29C66/43421 B29C66/71 B29C66/843 B29K2025/06 B29C66/12464 B29C66/4322 B29C66/542 B29K2025/00 B29C66/12441 B29C66/12449 B29C66/12469 B29C66/81417 B29C66/1162 B29C66/24244 B29C66/81415 B29C66/612 B29C66/8242 B29C66/723
European class:	B29C53/42 B29C65/20 B29C66/1122 B29C66/1142 B29C66/1162 B29C66/223 B29C66/43 B29C66/534 B29C66/727 B29C66/81435 B65B51/10 L29C53/36 L29C65/20B4 L29K105/04 L29K25/00
US class:	156/215 156/218 156/282 156/304.2 156/304.6 156/308.4 156/309.6 156/6.9 156/69 53/477 53/478 53/488

Classification Explorer

Forward Citations:	WO13132406, WO12123551, WO0024564, US9168708, US7963020, US7765775, US7549272, US6372079, US4671832, US4366014, US4189340, US4063977, US2017082314, US2013276959, US2009223839, US2009061153, JP4999170, JP49099170, ITMO20120067, GB2489212, FR2777494, FR2543484, FR2320839, EP3141374, EP0974446, EP0144569, EP0144569, BE1012078,

Abstract:
Source: US3799820A ABSTRACT OF THE DISCLOSURE A process of manufacturing **packages** from rigid-type foam plastics, preferably foam polystyrene. Such surfaces as are to be joined are heated by direct contact with movable heating jaws until the desired surface configuration having a layer of molten material thereon has been obtained. The surfaces are then immediately put together and subjected to pressure. After the surfaces have been pressed together a shaping member can be urged against them to shape the joint and wipe any excess molten material therefrom. The heating jaw surfaces are preferably oblique relative to the plane of the surfaces to be joined, whereby the surfaces are bevelled and enlarged to produce a high strength, overlapped weld joint. The surfaces to be joined may also be formed with alternating ridges and valleys to further increase the area of the surfaces joined. CROSS REFERENCE TO RELATED APPLICATION This is a continuation-in-part of my copending application Ser. No. 114,266, filed Feb. 10, 1971, entitled "A Process of Manufacturing **Open** or Closed **Packages** of Foam Plastics, Preferably Foam Polystyrene," now abandoned.



337) Family number: 962835 (US3595446A)

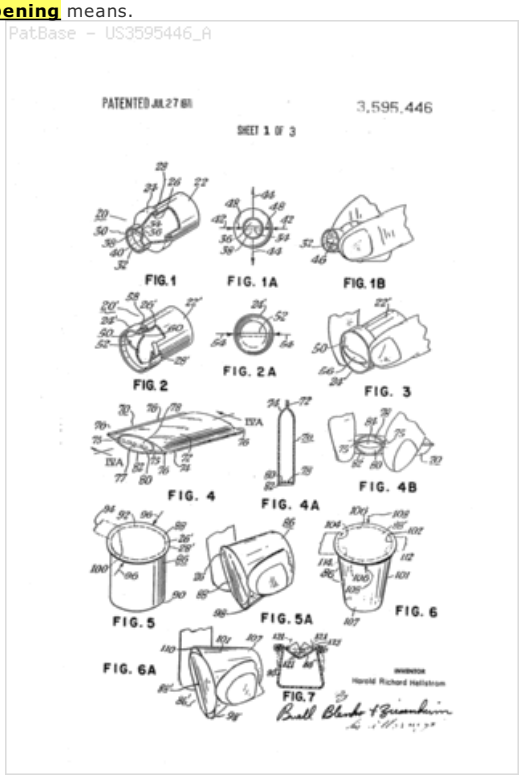
Title:	QUICK-**OPEN** **CONTAINER** STRUCTURE
Priority:	US19690812234 19690401

Family:

Publication number	Publication date	Application number	Application date
US3595446 A	19710727	US19690812234	19690401

Probable Assignee:	HELLSTROM HAROLD R
Assignee(s):(std):	HELLSTROM HAROLD R
Assignee(s):	HAROLD RICHARD HELLSTROM
Inventor(s):(std):	HELLSTROM HAROLD RICHARD
Inventor(s):	HAROLD RICHARD HELLSTROM
International class (IPC 8-9):	B65D47/20 (Advanced/Invention); B65D47/04 (Core/Invention)
International class (IPC 1-7):	B65D33/16 B65D85/56
CPC:	B65D47/2031
European class:	B65D47/20E2
US class:	206/540 222/213 222/541.6 229/123.2 229/125.35 229/404 229/906.1
Classification Explorer	
Cited documents:	US3371812 A, US3356267 A, US3179301 A, US3101870 A, US2812121 A, US2442646 A, US2316516 A,
Forward Citations:	WO9006269, WO8502597, WO8401143, WO16060607, WO10107532, WO04083073, USD657950, USD495209, US9845173, US9751655, US9399542, US8505807, US8444022, US7922045, US7077296, US6758390, US6206251, US4871093, US4696328, US3817428, US2011114678, US2010314434, US2010237107, US2009095766, US2009050655, US2007003171, US2004211823, US2004011862, US2004000550, GB2254836, GB2254836, FR2533196, EP1603813, CN102355840, CN102355840, AU2010226256,

Abstract:
Source: US3595446A (Claim 1) 1. A quick-**opening** stiffening means and comprising a **container** body section having an **opening** therein, **cover** means substantially coextending with said **opening** and **sealingly** joined thereto to form a **sealed** junction between said **container** section and said **cover** means, said junction extending about the entire periphery of said **opening**, means for forming frangible **opening** means in said **container** structure adjacent at least a portion of said junction, and stiffening means joined to one of said **cover** means and said **container** section and disposed about said periphery so that application of deformational forces to said **container** structure generally longitudinally but remotely of said **opening** means causes said stiffening means to induce a **dispensing** **opening** at said **opening** means.



338) Family number: 964354 (US3597895A)

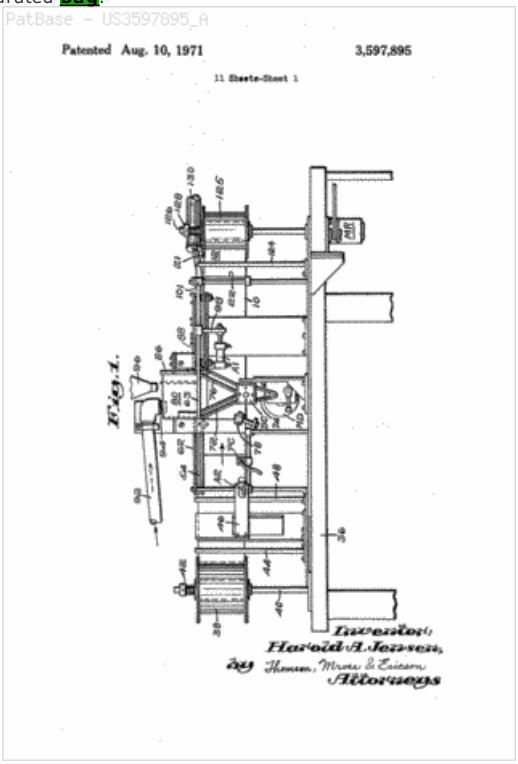
Title:	**PACKAGING** METHOD AND MACHINE
Priority:	US19690856092 19690908

Family:

Publication number	Publication date	Application number	Application date
US3597895 A	19710810	US19690856092	19690908

Probable Assignee:	LINVURE CO INC
Assignee(s):(std):	LINVURE CO INC ; LINVURE CO INC THE
Inventor(s):(std):	JENSEN HAROLD A
Inventor(s):	HAROLD A JENSEN
International class (IPC 8-9):	B65B43/26 B65B43/36 B65B61/12 B65B9/08 B65B9/093 (Advanced/Invention); B65B43/26 B65B61/04 B65B9/06 (Core/Invention)
International class (IPC 1-7):	B65B43/12 B65B43/26 B65B43/30 B65B43/36 B65B61/12 B65B9/08
CPC:	B65B9/093 B65B43/26 B65B43/36 B65B61/12
European class:	B65B43/26 B65B43/36 B65B61/12 B65B9/08 B65B9/093
US class:	53/29 53/385.1 53/455 53/562 53/570
Classification Explorer	
Cited documents:	US3462913 A, US3372797 A, US3364650 A, US3359703 A, US2272251 A, US2269532 A,
Forward Citations:	WO9307062, WO9107320, US9844911, US5603202, US5471822, US4945714, US4729203, US4522017, US4517788, US4490959, US4169345, US3746057, US3746056, US2015210031, US2013180082,

Abstract:
Source: US3597895A (Claim 1) 1. A method of **packaging** using a strip of connected **bags** formed from a longitudinally folded length of heat-**sealable** material having a series of transverse seams at spaced intervals along the strip and extending from the folded edge of the strip only partially across the strip toward the unfolded edge thereof, said method comprising the steps of: feeding said strip to position each successive **bag** at a loading station, then holding the portion of the strip which has not reached the loading station stationary while retracting the portion which has passed the loading station to **open** the unfolded longitudinal edge of the **bag** which is at the loading station for loading, then advancing only that portion of the strip which has passed the loading station to close the loaded **bag**, and repeating the advancing, **opening** and closing steps cyclically; heat-**sealing** the **bags** which have passed the loading station along a longitudinal seam joining the transverse seams and spaced inwardly from the unfolded longitudinal edge of the strip, and separating the connected **bags** from the portion of the strip lying between the longitudinal seam and the unfolded longitudinal edge of the strip; and carrying out the further steps, after the completion of said retracting step and prior to said advancing step, of gripping the portion of said strip which has previously passed the loading station and has been heat **sealed**, in either longitudinal direction from one of said transverse seams, partially tearing said one transverse seam, moving the gripped **bags** relatively to one another in opposite directions to tear said one transverse seam and thus separate one **bag** from the strip, and releasing the strip and the separated **bag**.



339) Family number: 117253 (US3650473A)

Title: LIQUID **DISPENSING** APPARATUS

Priority: US19700019401 19700313

Family:

Publication number	Publication date	Application number	Application date
BE764173 A	19710913	BE19710764173	19710312
CA941801 A1	19740212	CA19710105807	19710219
DE2112195 A1	19710923	DE19712112195	19710313
ES389215 A1	19740501	ES19710389215	19710313
FR2081938 A1	19711210	FR19710008813	19710312
FR2081938 B1	19740906	FR19710008813	19710312
GB1331842 A	19730926	GB19710023959	19710419
HK16077 A	19770415	HK19770000160	19770407
IL36259 A0	19710428	IL19710036259	19710222
IL36259 A1	19730629	IL19710036259	19710222
NL7103043 A	19710915	NL19710003043	19710308
US3650473 A	19720321	US19700019401	19700313

Probable Assignee: WAYNESBORO TEXTILES INC

Assignee(s):(std)**:** AFA CORP

Assignee(s): AFA CORP FLORID US ; AFA CORP FLORIDA ; FIRST NATIONAL BANK OF BOSTON ; AFA OF FLORIDA CORP ; AFA CORP OF FLORIDA ; AFA CORP FLORIDA 14201 NORTHWEST 60TH AVENUE MIAMI LAKES ETAT DE FLORIDE E U A ; MALONE CARL E ; AFA OF FLORIDA THE CORP ; AFA CORPOF FLORIDA ; AFA CORP FLORIDA 14201 NORTHWEST 60TH AVENUE MIAMI LAKES ETAT DE FLORIDE EUA ; WALTER E HELLER AND CO INC ; WAYNESBORO TEXTILES INC ; AFA CONSOLIDATED CORP

Inventor(s):(std)**:** MALONE C E ; MALONE CARL E

Inventor(s): C E MALONE ; CARL E MALONE ; CE MALONE

Agent(s): REINHOLD COHN AND PARTNERS

International class (IPC 8-9): B05B11/00 (Advanced/Invention); B05B11/00 (Core/Invention)

International class (IPC 1-7): B01J3/02 B05B1/12 B05B11/00 B05B9/043 B65D39/00 B65D47/00 B65D83/00 B65D83/14 F04B21/00 F04F

CPC: B05B11/0032 B05B11/3011 B05B11/305

European class: B05B11/00B3F B05B11/00P3L2 B05B11/30C5B L05B11/30H2

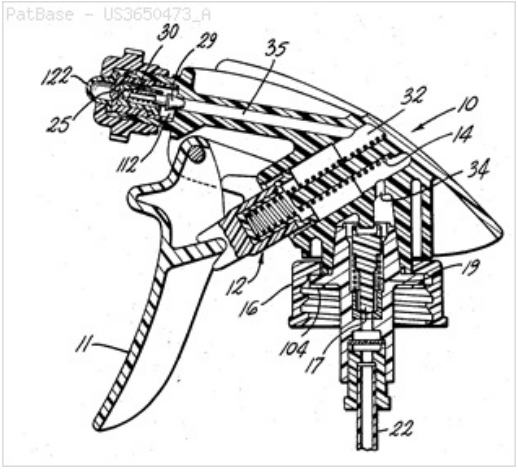
US class: 220/304 220/38.5 220/385 222/383 222/383.1 222/541 222/541.2 239/333

Classification Explorer

Cited documents: US3298573 A, US3282477 A, US3255933 A, US3241731 A, US3220618 A, US3162329 A, US3149763 A, US3061202 A, GB661534 A, GB1180376 A, FR1287318 A, FR1198955 A, DE1009116 B,

Forward Citations: WO9311878, WO07065065, WO07040720, WO0076876, USD570214, USD536748, USD533235, USD533234, USD533233, USD525123, US9776772, US9546346, US8733385, US7717306, US7249692, US6886718, US6851625, US6227411, US6212959, US5816503, US5740948, US5706983, US5656227, US5590834, US5513800, US5499766, US5474210, US5373991, US5368234, US5197638, US5072860, US4953791, US4526298, US4503998, US4489890, US4346821, US4345691, US4260079, US4230277, US3840157, US3814292, US2014110439, US2011120570, US2008230631, US2006113329, US2006008313, US2004217134, JP8502779, FR2528328, EP0617641, EP0457252, EP0097094, DE2759594, DE2705071, AU660758,

Abstract:
Source: US3650473A A combined **closure** and liquid pumping device for a **container** having a cap adapted to screw onto a threaded spout of the **container**. The **closure** also includes a pump mechanism having a liquid ejection nozzle orifice connected by a liquid conduit to an inlet within the **container**. The pump has inlet and outlet check valves in the conduit and a pump chamber connected to the conduit between the valves. The outlet valve is spaced from the orifice and is lightly biased to closed position thus to define an air chamber between the outlet valve and the orifice. An **openable** **seal** blocks communication between the orifice and the exterior of the **closure** for disabling liquid pumping operation of the pump and also serves as a static **seal** to prevent leakage from the **container** via the liquid conduit.



340) Family number: 29431126 (US3696952A)

Title: BULK CARGO HANDLING SYSTEM AND METHOD

Priority: CA19710108392 19710322 US19700021966 19700323 US19700021966 19700323 US19720224759 19720209 US19700083952 19701026

Family:

Publication number	Publication date	Application number	Application date
CA932684 A1	19730828	CA19710108392	19710322
CA995603 A1	19760824	CA19730173196	19730605
CA995603 A2	19760824	CA19730173196	19730605
DE2113684 A1	19711216	DE19712113684	19710322
DE2113684 C2	19840607	DE19712113684	19710322
DK138786 B	19781030	DK19710001372	19710322
DK138786 C	19790402	DK19710001372	19710322
FR2087820 A5	19711231	FR19710010094	19710323
GB1302830 A	19730110	GB19710025204	19710419
JP57002591 B4	19820118	JP19710016242	19710323
NL163999 B	19800616	NL19710003840	19710322
NL163999 C	19801117	NL19710003840	19710322
NL7103840 A	19710927	NL19710003840	19710322
NO140661 B	19790709	NO19710001090	19710322
NO140661 C	19791017	NO19710001090	19710322
SE358365 B	19730730	SE19710003652	19710322
US3696952 A	19721010	US19700083952	19701026
US3868042 A	19750225	US19720224759	19720209

Probable Assignee: SEA LAND SERVICE

Assignee(s):(std)**:** SEA LAND SERVICE ; SEA LAND SERVICE INC ; SEA LAND SERVICE INC ELIZABETH NEW JERSEY VER ST

Assignee(s): SEA LAND SERVICE INC US ; SEA LAND SERVICE INC ELIZABETH N J US ; SEA LAND SERVICE INC ELIZABETH NEW JERSEY VER ST V AM ; BERT A BODENHEIMER ; BODENHEIMER BERT A ; POWERTEX INC ; POWERTEX INC A CORP OF VT

Inventor(s):(std)**:** BODENHEIMER B ; BODENHEIMER B A ; BODENHEIMER B US ; BODENHEIMER BERT A ; A BODENHEIMER BERT

Inventor(s): BERT A BODENHEIMER

International class (IPC 8-9): B65D88/20 B65D88/22 B65D90/04 B65G65/34 (Advanced/Invention); B65D88/00 B65D90/04 B65G65/00 (Core/Invention)

International class (IPC 1-7): B65D25/14 B65D25/16 B65D33/00 B65D51/16 B65D6/00 B65D87/00 B65D87/28 B65D88/00 B65D88/12 B65D88/20 B65D88/22 B65D88/62 B65D89/06 B65D89/08 B65D90/04 B65G3/00 B65G65/34 B65J1/02

CPC: B65D90/047 B65D2590/046

European class: B65D90/04D2 L65D590/04D6

US class: 206/46R 206/527 214/152 214/305 214/314 220/1.5 220/1.6 220/63R 220/65 229/14B 229/DIG.3 414/412 414/421 414/810

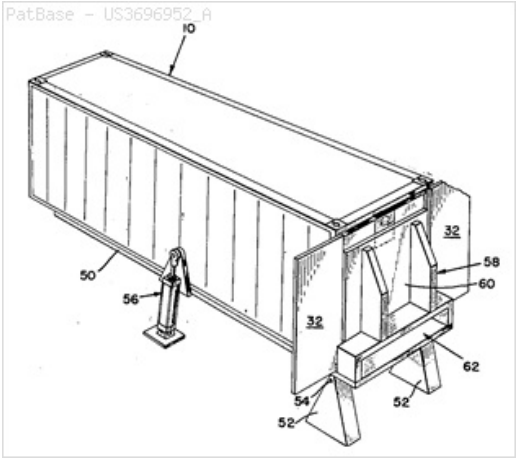
Classification Explorer

Cited documents: US3726067 A, US3574332 A, US3386605 A, US3309007 A, US3173573 A, US3171449 A, US3163544 A, US3105617 A, US3087491 A, US2989213 A, US2896839 A, US2748673 A, US2712797 A, GB1091712 A,

Forward Citations: WO8911428, WO8001793, WO17194147, WO13169869, WO05073095, WO05073095, WO02051236, WO02051236, USRE36214, USRE29721, US9567157, US9487352, US9334107, US9067729, US8418731, US8313268, US8162164, US7954903, US7699079, US7506776, US7438461, US7410576, US7226019, US6951321, US6948887, US6206623, US5890611, US5595315, US5564891, US5520496, US5489037, US5482425, US5454685, US5449082, US5421476, US5318193, US5263601, US5244332, US5222621, US5181625, US5137170, US5059084, US5040693, US5028197, US4966310, US4875811, US4863339, US4848617, US4836411, US4627549, US4470749, US4461402, US4232803, US4133451, US4054226, US3980196, US3951284, US3926331, US3904084, US2014339241, US2013239523, US2009096242, US2009010098, US2008296295, US2008257893, US2007193649, US2007071590, US2007034578, US2007025649, US2006186117, US2006175324, US2005258309, US2005167448, US2004188563, TWI440594, TWI341276, KR101178697, JP62008989, GB2487814, GB2319243, GB2282135, GB2200094, GB2200094, GB2121361, EP1992576, EP1195334, EP0627368, EP0603293, EP0540695, EP0538563, EP0517046, EP0067483, EP0021814, DE2450821, DE102007032017, DE102007032017, CN104661929, CN103502111, CN103502111, AU693598, AU687950, AU658585, AU655141, AU2005207969,

Abstract:
Source: US3696952A A system for transporting bulk cargo within conventional freight **containers** which includes a disposable **container** liner adapted to be positioned within a **container** or truck. The liner includes a flexible **bag** member having the **open** end or ends closed by bulkheads. **Openings**, which are normally **sealed** during transport of the **container**, are provided in the rear bulkheads for facilitating loading and unloading of the liner.

PatBase - US3696952_A



341) Family number: 8103306 (US4252257A)

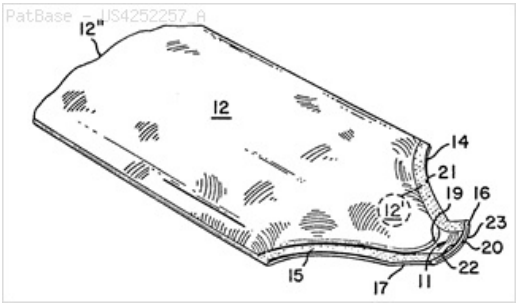
Title:	Automatic **closure** for **containers** having a pinch-off fold
Priority:	US19690842108 19690716 US19710176874 19710901 US19740482337 19740624 US19780949900 19781010

Family:

Publication number	Publication date	Application number	Application date
US3610477 A	19711005	US19690842108	19690716
US4252257 A	19810224	US19780949900	19781010

Probable Assignee:	HERZIG ALBERT M
Assignee(s):(std):	HERZIG ALBERT M
Assignee(s):	ALBERT M HERZIG
Inventor(s):(std):	HERZIG ALBERT M
Inventor(s):	ALBERT M HERZIG
International class (IPC 8-9):	B65D1/32 B65D47/20 (Advanced/Invention); B65D1/00 B65D47/04 (Core/Invention)
International class (IPC 1-7):	B65D1/32 B65D35/52 B65D47/44 B65D5/72 B65D83/00 B65D85/72
CPC:	B65D1/32 B65D47/2031
European class:	B65D1/32 B65D47/20E2
US class:	222/213 222/491 222/494
Classification Explorer	
Cited documents:	US3878977 A, US3815794 A, US3009498 A, US2815150 A, US2663461 A, US2143661 A,
Forward Citations:	WO9611854, WO9512531, WO9313992, WO8905759, WO8802339, WO0249933, USD769714, USD573462, USD437223, US9549797, US9415918, US9309035, US9260231, US9254951, US8770449, US8376183, US8061563, US7757894, US7669736, US7658542, US7241066, US7077296, US6932241, US6776307, US6360916, US6357631, US6244468, US6216916, US5996845, US5918783, US5529224, US5307955, US5207355, US5099885, US5067635, US5018646, US5000350, US4988016, US4946062, US4932562, US4917267, US4328912, US3935975, US3923210, US3815794, US2013341350, US2013167865, US2012118920, US2012114269, US2012045732, US2010163584, US2010084427, US2010008602, US2009302057, US2007280569, US2007267439, US2007228073, US2007045340, US2006182370, US2004226646, US2004159674, US2004069809, US2002158083, EP2909096, EP2517978, EP1193187, EP0226290, EP0160336, EP0078471, AU682215,

Abstract:
Source: US4252257A An automatic **closure** for collapsible tubes, squeeze bottles, and the like **containers** of the type formed from resilient plastic material. The **container** typically is tubelike, provided with a tapered or frusto-conical neck portion terminating in a flattened mouth defining end lips forming an **openable** **closure**. Pressure applied to the body of the **container** remote from the lips to forms a transverse pinch-off across the end portions wherein the lips are deflected or bent along a line of curvature to one side or the other and at an angle to the axis of the **container**, and wherein the lips are also bowed, having a curved contour. Such pinch-off forms a **closure** across the neck portion. The pinch-off **opens** in response to pressure on the walls of the **container** proximate thereto in a manner to relive the pinch-off and permit the fluid contents to flow. Specifically, the pinch-off is in the following form: the end lips of the neck have a bowed contour about the lengthwise dimension. The neck is deflected or bent laterally at an angle. The pinch-off is at the line of deflection of the bowed end lips. Along this line (pinch-off) the lips are held together in **sealing** relationship but they will respond to **open** and release fluid upon exertion of pressure at a predetermined key area adjacent to the pinch-off line.



342) Family number: 1342490 (US3656271A)

Title: **PACKAGING** MACHINE

Priority:
AT19710003329 19710419
DK19710001899 19710420
NO19710001450 19710419
US19700030069 19700420
AT19740003356 19740423
CA19740197465 19740411
US19720244776 19720417
CA19710110508 19710416
DK19740006425 19741210
NO19750004276 19751216

Family:

Publication number	Publication date	Application number	Application date
AT327102 B	19760112	AT19710003329	19710419
AT332971 A	19750315	AT19710003329	19710419
AT335674 A	19771115	AT19740003356	19740423
BE765957 A	19711019	BE19710765957	19710419
CA948603 A1	19740604	CA19710110508	19710416
CA972331 A1	19750805	CA19740197465	19740411
CA972331 A2	19750805	CA19740197465	19740411
CH542092 A	19730930	CH19710005657	19710419
CH544028 A	19731228	CH19730008146	19710419
DE2118998 A1	19711202	DE19712118998	19710420
DK642574 A	19750520	DK19740006425	19741210
FR2089885 A5	19720107	FR19710013825	19710419
GB1351181 A	19740424	GB19710009966	19710419
GB1351182 A	19740424		19710419
JP51069874 A2	19760616	JP19750134610	19751108
JP53020914 B4	19780629	JP19750134610	19751108
JP939410 C3	19790130	JP19750134610	19751108
LU63014 A	19720302		19710419
NL7105253 A	19711022	NL19710005253	19710419
NO135173 B	19761115	NO19710001450	19710419
NO135173 C	19770223	NO19710001450	19710419
NO754276 A	19711021	NO19750004276	19751216
SE384831 B	19760524	SE19710005053	19710419
SE384831 C	19760902	SE19710005053	19710419
SE7412294 A	19740930	SE19740012294D	19740930
US3656271 A	19720418	US19700030069	19700420
US3796428 A	19740312	US19720244776	19720417
ZA7102478 A	19720126	ZA19710002478	19710419

Probable Assignee: FIRST BRANDS CORP

Assignee(s):(std)**:** UNION CARBIDE CORP

Assignee(s): UNION CARBIDE CORP US ; UNION CARBIDE CO ; UNION CARBIDE CORP 270 PARK AVENUE NEW YORK ETAT DE NEW YORK 10017 E U A ; O SHEA RONALD J ; MORGAN GUARANTY TRUST CO OF NEW YORK AND MORGAN BANK (DELAWARE) COLLATERAL (AGENTS) SEE RECORD FOR REMAINING ASSIGNEES AS ; MORGAN GUARANTY TRUST CO OF NEW YORK AND MORGAN BANK DELAWARE COLLATERAL AGENTS SEE RECORD FOR REMAINING ASSIGNEES AS ; CONNECTICUT NATONAL BANK ; FIRST BRANDS 39 OLD RIDGEBURY RD DANBURY CT 06817 ; FIRST BRANDS 39 OLD RIDGEBURY RD DANBURY CT 06817 A CORP OF DE CORP ; FIRST BRANDS CORP ; HAASE BERND W ; HAWKINS ALBERT W ; MANUFACTURERS HANOVER TRUST CO ; MORGAN GUARANTY TRUST CO ; MORGAN GUARANTY TRUST CO OF NEW YORK AND MORGAN BA

Inventor(s):(std)**:** ALBERT WILLIAM HAWKINS ; ARUBAATO UIRIAMU HOOKINSU ; BAANDO WAANAA HAASU ; BERND WERNER HAASE ; HAASE B ; HAASE B W ; HAASE BERND W ; HAWKINS A ; O SHEA R ; O SHEA R J ; O SHEA RONALD J ; RONALD JOHN O SHEA ; RONARUDO JON OOSHII ; HAWKINS A W ; HAWKINS ALBERT W

Inventor(s): JOHN O SHEA RONALD ; WERNER HAASE BERND ; WILLIAM HAWKINS ALBERT ; R J O SHEA ; RJ O SHEA ; RONALD J O SHEA ; O SHEA R US ; HAWKINS A US ; HAASE B US ; BW HAASE ; BERND W HAASE ; A W HAWKINS ; ALBERT W HAWKINS ; AW HAWKINS ; B W HAASE

International class (IPC 8-9): B31B25/00 B65B25/14 B65B25/20 B65B35/50 B65B7/06 B65G47/30 B65H31/38 (Advanced/Invention); B31B25/00 B65B25/00 B65B25/14 B65B35/50 B65B7/00 B65G47/30 B65H31/34 (Core/Invention); B65B (Subclass/Invention)

International class (IPC 1-7): B31B49/00 B65B25/14 B65B35/34 B65B35/50 B65B5/00 B65B5/06 B65B51/06 B65B63/04 B65B7/06 B65G47/30 B65H31/34 B65H31/36 B65H31/38

CPC: B65H2701/176 B65B35/50 B65B25/145 B65H31/38

European class: B65B25/14C B65B35/50 B65H31/38

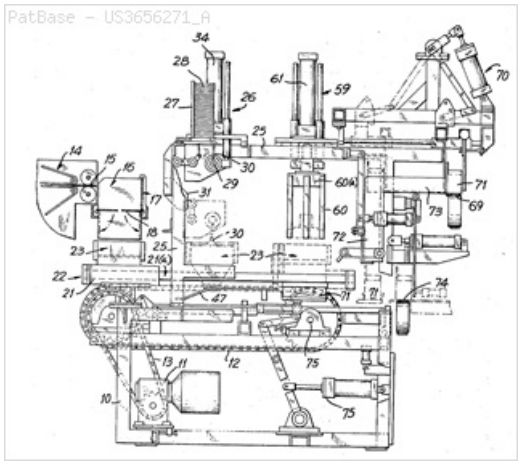
US class: 271/21. 271/210 53/120 53/126 53/21 53/210 53/429 53/437 53/447 53/473 53/525

Classification Explorer

Cited documents: US923151 A, US3481099 A, US3309834 A, US3225942 A, US3053024 A, US3032340 A, US1280830 A,

Forward Citations: WO06071277, USRE42267, US9346293, US9180701, US7621109, US7497064, US7470102, US7398629, US7364398, US7219887, US7073310, US6912826, US6901718, US6877740, US6832886, US6641358, US6322315, US6254522, US5852917, US5375393, US4751807, US4472923, US3919827, US3805482, US3766701, US2013193628, US2011225935, US2006207222, US2006137296, US2006070352, US2005258589, US2005235612, US2005218151, US2005087925, US2005023746, US2004144062, US2004065057, US2003082044, EP1831077, DE2939310, DE2908943,

Abstract:
Source: US3656271A Apparatus and method are provided for automatically loading a desired quantity of flat, flexible **bags** into **dispensing** cartons which comprises, in combination, a stacker mounted adjacent to and aligned with a completed **bag dispenser**, said stacker having vibration means for automatically collecting a desired number of completed **bags** in an aligned stack, means for conveying said aligned stack of **bags** to a carton loading station, means for depositing a stiffening member over a predetermined portion of said aligned stack of **bags**, means for folding said stack of **bags**, means for conveying an empty carton from a continuous conveyor of empty cartons to said carton loading station, and means for automatically folding and stuffing said stack of **bags** into an empty carton at said carton loading station.


PatBase - US3656271_A
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343) Family number: 974636 (US3613760A)

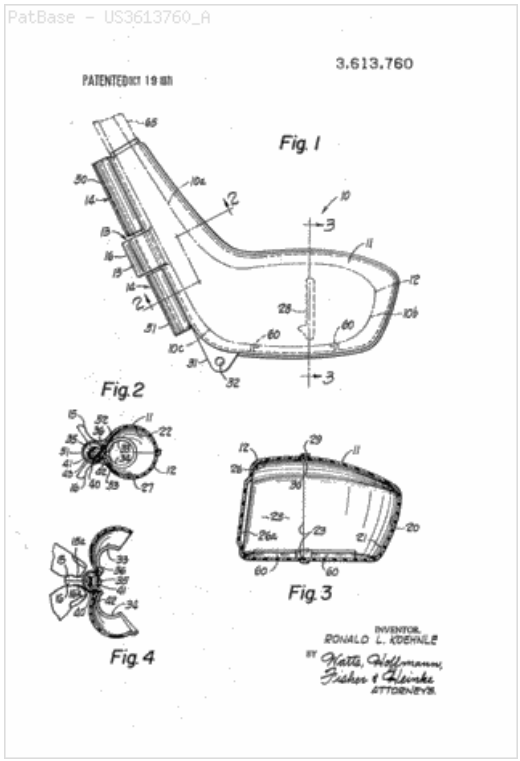
Title:	GOLF CLUB **COVER**
Priority:	US19690846140 19690730

Family:

Publication number	Publication date	Application number	Application date
US3613760 A	19711019	US19690846140	19690730

Probable Assignee:	RELIABLE PATTERN WORKS INC
Assignee(s):(std)**:**	PETRO Z HU ; RELIABLE PATTERN WORKS INC
Inventor(s):(std)**:**	KOEHNLE RONALD L
Inventor(s):	RONALD L KOEHNLE
International class (IPC 8-9):	A63B55/00 (Advanced/Invention); A63B55/00 (Core/Invention)
International class (IPC 1-7):	A63B53/00 A63B53/04
CPC:	A63B60/62
European class:	A63B55/00C
US class:	150/160 150/52G
Classification Explorer	
Cited documents:	US3117609 A, US2705039 A, US2508525 A, GB383013 A,
Forward Citations:	WO9746289, WO9008576, USD603473, USD534601, USD477042, USD469835, USD469491, US8225830, US8181681, US7686048, US7188647, US6874627, US6820665, US6793072, US6202723, US6192950, US6161691, US6119742, US6116307, US5988378, US5050655, US5005624, US5000238, US4838416, US4378832, US3892267, US2011120604, US2008035255, US2004261924, US2004079458, US2003213711, US2003136486, US2003121808, JP62048371, JP55137671, EP2090337,

Abstract:
Source: US3613760A (Claim 1) 1. In a **cover** for a golf club: a. first and second molded **cover** members for enclosing at least a head of a golf club; b. a nonmetallic hinge between said members providing for relative movement of the over members away from each other to enable removal of a golf club head; c. said hinge comprising a first hinge part continuous with one **cover** member and defining a hinge bearing surface, and a second hinge part continuous with the other **cover** member and defining a second hinge bearing surface, said bearing surfaces moving with said respective **cover** members when said members move relative to each other; and, d. spring means engaging said **cover** members at least adjacent said hinge for urging said **cover** members toward each other to enclose a club head.



344) Family number: 1718266 (US3762540A)

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Title: RECEPTACLE HAVING AT LEAST THREE CHAMBERS

Priority: DE19702024331 19700519 DE19702024402 19700519 DE19712157492 19711119

Family:

Publication number	Publication date	Application number	Application date
AT320135 B	19750127	AT19710004359	19710519
CH538877 A	19730715	CH19710007372	19710519
CH551906 A	19740731	CH19710007371	19710519
DE2024331 A1	19711202	DE19702024331	19700519
DE2024331 B2	19730726	DE19702024331	19700519
DE2024331 C3	19740221	DE19702024331	19700519
DE2024402 A1	19711202	DE19702024402	19700519
DE2024402 C3	19800814	DE19702024402	19700519
DE2157492 A1	19730530	DE19712157492	19711119
FR2092152 A1	19720121	FR19710018964	19710519
FR2092152 B1	19730608	FR19710018964	19710519
FR2139835 A1	19730112	FR19720013678	19720413
FR2139835 B1	19740809	FR19720013678	19720413
GB1334712 A	19731024	GB19710015805	19710519
GB1334713 A	19731024		19710519
NL7106866 A	19711123	NL19710006866	19710519
SE379633 B	19751020	SE19710006535	19710519
SE379633 C	19760129	SE19710006535	19710519
US3762540 A	19731002	US19710142236	19710511
ZA7103237 A	19720329	ZA19710003237	19710519

Probable Assignee: DENTAIRE IVOCLAR SCHAAN LIECHTENSTEIN ETS

Assignee(s):(std)**:** DENTAIRE IVOCLAR ETS ; DENTAIRE IVOCLAR FL ETS

Assignee(s): DENTAIRE IVOCLAR SCHAAN LIECHTENSTEIN ETS ; ESTABLISSEMENT DENTAIRE IVOCLAR ; ETAB DENTAIRE IVOCLAR ; ETABLISSEMENT DENTAIRE IVOCLAR ; ETABLISSEMENTS DENTAIRE IVOCLAR ; IVOCLAR ETS DENTAIRE FL ; ETABLISSEMENT DENTAIRE IVOCLAR SCHAAN LIECHTENSTEIN ; IVOCLAR DENTAIRE FL ETS ; DENTAIRE IVOCLAR ETABLISSEMENT

Inventor(s):(std)**:** BAUMANN E ; BAUMANN ERWIN ; BAUMANN ERWIN DR ; BEHAM G ; BEHAM GERHARD ; BEHAN GERHARD ; FRICK H ; FRICK HANSJOERG ; GERHARD BEHAM ; HANSJOERG FRICK

Inventor(s): FRICK HANSJOERG SCHAAN LIECHTENSTEIN ; BEHAM GERHARD VADUZ ; BAUMANN ERWIN DR NENDELN ; GERHARD BEHAN ; H FRICK ; G BEHAM ; DR ERWIN BAUMANN ; E BAUMANN ; ERWIN BAUMANN

International class (IPC 8-9): A61C5/06 A61J1/00 A61J1/20 A61M3/00 B65D51/28 B65D75/32 B65D81/32 (Advanced/Invention); A61C5/00 A61J1/00 A61J1/14 A61M3/00 B65D51/24 B65D75/28 B65D81/32 (Core/Invention)

International class (IPC 1-7): A61C5/00 A61C5/06 A61K5/00 A61M3/00 A61M5/24 B01F3/00 B21D51/00 B23K21/00 B23K27/00 B65D25/00 B65D25/08 B65D41/00 B65D81/00 B65D81/32

CPC: A61J1/2093 A61M3/005 B65D51/2821 B65D75/32 B65D81/32 B65D81/3238 A61J1/2027 A61C5/66

European class: A61C5/06C A61J1/00M4 A61J1/20D A61M3/00M B65D81/32D1 K61J1/20A4B

US class: 206/219 206/4.7A 206/63.5 215/6 604/416

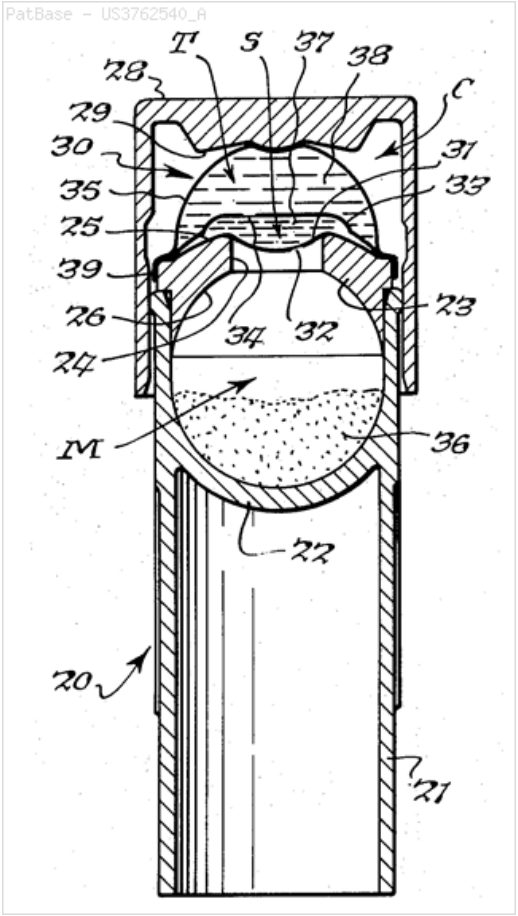
Classification Explorer

Cited documents: US3651932 A, US3651615 A, US3425598 A, US3415360 A, US3190499 A, US1077835 A, GB1180181 A, FR91607 E,

Forward Citations: WO9403369, WO9311049, WO14197317, WO14117124, WO12095617, WO07017225, WO07017225, WO03076296, WO03006338, WO03006338, WO0026107, USRE29916, US9700397, US9636332, US9572800, US8678183, US8540123, US8491211, US8479914, US8303912, US8256949, US8016104, US7534241, US7320398, US7128241, US6726005, US6676322, US6612767, US6561232, US6450717, US6439380, US6376019, US6360886, US6322852, US5938016, US5794802, US5736355, US5678709, US5540341, US5385236, US5346061, US5275298, US5172807, US5052553, US4941751, US4741437, US4580682, US4579823, US4461837, US4304869, US4197943, US4116354, US4084320, US4053648, US3963120, US3907106, US2017151050, US2016106584, US2012285844, US2010221818, US2009171361, US2007090000, US2007036684, US2005284498, US2005196431, US2005070873, US2004106914, US2003063944, US2002018689, JP2057586, GB2229374, GB2229374, GB2220914, FR2634180, FR2202675, EP2737872, EP1842795, EP1789335, EP1483170, EP1275593, EP1250864, EP1163918, EP1163918, EP1127553, EP1124733, EP1037811, EP0832137, EP0598001, EP0040959, DE9204508, DE4315920, DE2918417, DE2451167, DE2324296, DE19959437, DE19959437, DE112007003620, DE102006007133, DE10119480, DE10022563, CN103845133, CN103845133,

Abstract:
Source: US3762540A A receptacle for storing and subsequently mixing at least three ingredients of a product such as a dental preparation. The receptacle comprises a first chamber at one side of a perforated dividing wall, and a second and at least a third chamber at the other side of the dividing wall. A collapsible capsule adapted to form at least one of the second and third chambers comprises metal foil or compound material composed of metal foil and plastic film. A method of making such capsule includes deep-drawing and cold welding steps.

PatBase - US3762540_A



345) Family number: 495654 (US3759439A)

Title:	**BAG** WITH TEAR STRIP
Priority:	GB19700017687 19700414

Family:

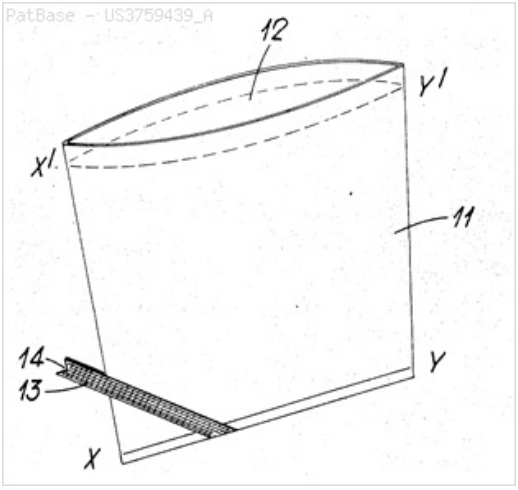
Publication number	Publication date	Application number	Application date
CA959460 A1	19741217	CA19710110043	19710408
DE2117980 A1	19721019	DE19712117980	19710414
DE2128377 A1	19711216	DE19712128377	19710608
GB1355036 A	19740605	GB19700017687	19700414
US3759439 A	19730918	US19710132674	19710409

Probable Assignee:	ICI LTD
Assignee(s):(std):	ICI LTD
Assignee(s):	IMP CHEMICAL IND LTD ; IMPERIAL CHEMICAL INDUSTRIES LIMITED ; IMPERIAL CHEMICAL INDUSTRIES LTD ; IMPERIAL CHEMICAL INDUSTRIES LTD GB ; STEEL MARGARET L ; TRUEMAN STEPHEN E ; CROSS WILLIAM T
Inventor(s):(std):	CROSS W ; CROSS WILLIAM T ; STEEL M ; STEEL MARGARET L ; TRUEMAN S ; TRUEMAN STEPHEN E
Inventor(s):	TRUEMAN S GB ; STEEL M GB ; CROSS W GB
International class (IPC 8-9):	B65D33/00 B65D65/36 B65D75/58 C08B37/10 (Advanced/Invention); B65D33/00 B65D75/52 C08B37/00 (Core/Invention)
International class (IPC 1-7):	A61K31/725 B29D3/02 B61D17/04 B65D17/24 B65D33/00 B65D33/16 B65D5/54 B65D65/36 B65D75/66 C08B37/10
CPC:	B65D75/5816 C08B37/0075
European class:	30H17C8 B65D75/58D C08B37/00P2G
US class:	229/6.6 383/200 383/205 383/33 383/89 383/90

Classification Explorer

Cited documents:	US3616990 A, US3446632 A, US3341108 A, US3146912 A, US3088654 A, FR1359938 A,
Forward Citations:	WO05016781, WO04045981, US8056287, US6679629, US6610338, US6585413, US5984088, US5620095, US5470419, US5378066, US5215381, US5184896, US4954383, US4898477, US4708249, US4703042, US4664263, US4595103, US2007264466, US2006280386, US2006110081, GB2499258, GB2332899, GB2308349, EP1508530, EP1103485, EP0533688, EP0256880, DE3440100, DE3422407, CN106185031, AU2004264388,

Abstract:
Source: US3759439A Plastic film having extending wholly or partly across it a flexible reinforcement having a highly localised line of weakness, the reinforcement being bonded to the surface of the film or incorporated partly or wholly within its thickness. The reinforcement may be, for example, a woven textile web material or plastic sheet. The resulting film may be used to make **containers** which can be easily **opened** by tearing along the line or lines of weakness in the reinforcement.



346) Family number: 496940 (US3748235A)

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Title: POLLUTION FREE DISCHARGING AND QUENCHING SYSTEM

Priority: DE19702029432 19700615 US19710151891 19710610

Family:

Publication number	Publication date	Application number	Application date
DE2029432 A1	19711223	DE19702029432	19700615
DE2029432 B2	19730208	DE19702029432	19700615
DE2029432 C3	19730830	DE19702029432	19700615
FR2095653 A5	19720211	FR19710019054	19710526
GB1321384 A	19730627	GB19710016210	19710521
JP51034401 B4	19760927	JP19710021111	19710407
US3748235 A	19730724	US19710151891	19710610

Probable Assignee: OTTO AND CO GMBH DR C

Assignee(s):(std)**:** CARVES SIMON LTD ; OTTO AND CO GMBH DR C

Assignee(s): OTTO ET COMP GMBH ; SIMON CARVES LTD ; C OTTO AND CO GMBH DT

Inventor(s):(std)**:** PRIES ERICH DIPL ING ; PRIES E

Inventor(s): PRIES E DT

International class (IPC 8-9): C10B33/00 C10B39/04 (Advanced/Invention); C10B33/00 C10B39/00 (Core/Invention)

International class (IPC 1-7): C10B33/00 C10B39/00 C10B39/08 C10B39/12 C10B39/14

CPC: C10B39/04 C10B33/003

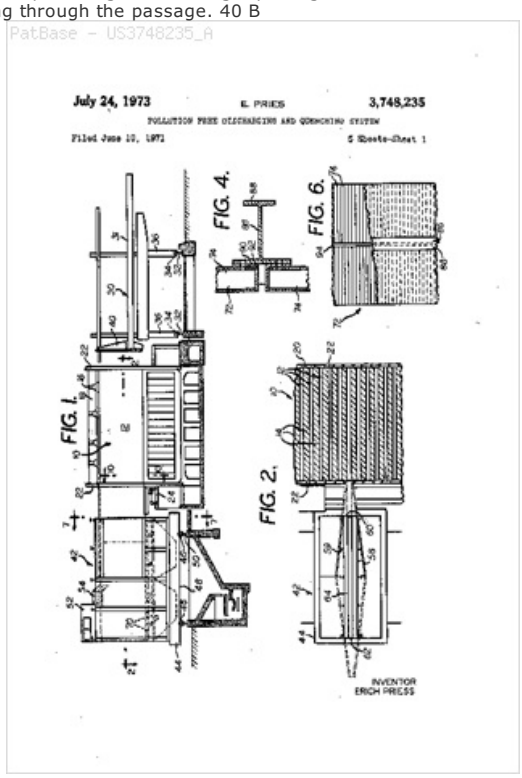
European class: C10B33/00B C10B39/04

US class: 202/227 202/263 414/212 414/215

Classification Explorer

Forward Citations: WO9012074, WO8001567, US9862888, US9708542, US9683740, US9580656, US9476547, US9359554, US9321965, US9273250, US9273249, US9249357, US9243186, US9238778, US9200225, US9193915, US9193913, US9169439, US7998316, US5192398, US5190617, US4997527, US4886580, US4285772, US4213828, US4213827, US4194951, US4039394, US4028192, US2010236914, RU2593161, JP2014506605, JP2014503021, DE3009021, DE2830207, DE2531129,

Abstract:
Source: US3748235A ABSTRACT OF THE DISCLOSURE
An apparatus for receiving a cake of hot coke from a selected one of a battery of coke ovens and for trans- lg porting the coke to a remote coke quenching station in an essentially pollution-free manner includes a vehicle adapted to be driven to a selected coke oven and thence to the coke quenching station. A housing is carried on the vehicle for receiving a cake of hot coke from an oven, %q the interior dimensions of the housing conforming substantially to the interior dimensions of the selected oven. The housing has grated side walls to expose a substantial portion of a coke cake disposed therein to the spray generated at the coke quenching station. A **container** is mounted on the vehicle for providing a smoke-tight environment around the housing, the **container** having a door for permitting a cake of hot coke to be pushed into the housing. Guide means are provided for establishing a smoke-tight passage between a selected oven and the **container** so that a cake of hot coke may be pushed into the housing through the guide means without polluting the surrounding environment. A method is also disclosed for providing a pollutionfree transfer of hot coke from an oven into a coke-receiv- ing housing of a coke-carrying vehicle for transportation of the coke to a remote coke-quenching tower. The method comprises the steps of providing a smoke-tight passage between the oven and the housing, and pushing the hot coke out of the oven into the housing through the passage. 40 B



347) Family number: 40973717 (US3799430A)

Title: **STORAGE** RECEPTACLE

Priority: FR19710012631 19710407

Family:

Publication number	Publication date	Application number	Application date
AT323066 B	19750625	AT19710010822	19711216
BE778520 A	19720516	BE19720778520	19720126
CH557277 A	19741231	CH19720002675	19720224
DE2147409 A1	19721019	DE19712147409	19710922
DE2147409 B2	19730816	DE19712147409	19710922
DE2147409 C3	19740314	DE19712147409	19710922
ES171987 U	19720116	ES19710171987U	19710826
ES171987 Y	19720816	ES19710171987U	19710826
FR2151431 A5	19730420	FR19710012631	19710407
GB1303020 A	19730117	GB19710059039	19711220
LU64005 A	19720412		00000000
NL7111564 A	19721010	NL19710011564	19710823
NO132039 B	19750602	NO19720000371	19720210
NO132039 C	19750910	NO19720000371	19720210
SE392871 B	19770425	SE19720003930	19720327
US3799430 A	19740326	US19720228004	19720222
ZA7201244 A	19721129	ZA19720001244	19720225

Probable Assignee: HUGUENIN

Assignee(s):(std)**:** HUGUENIN JULES ; HUGUENIN J

Assignee(s): HUGUENIN J FR ; HUGUENIN ; HUGUENIN JULES 14 RUE DE L ESPLANADE SCY CHAZELLES ; HUGUENIN JULES SCY CHAZELLES FRANKREICH ; HUGUENIN JULES 14 RUE DE L ESPLANADE SCY CHAZELLES FRANCE

Inventor(s):(std)**:** HUGUENIN J ; HUGUENIN JULES

Inventor(s): HUGUENIN JULES SCY CHAZELLES FRANKREICH ; HUGUENIN J FR

International class (IPC 8-9): B65F1/06 (Advanced/Invention);
B65F1/04 (Core/Invention)

International class (IPC 1-7): A47B77/18 B65B67/12 B65F1/00 B65F1/04 B65F1/06 B65F1/14

CPC: B65F1/06

European class: B65F1/06

US class: 232/43.2 248/101

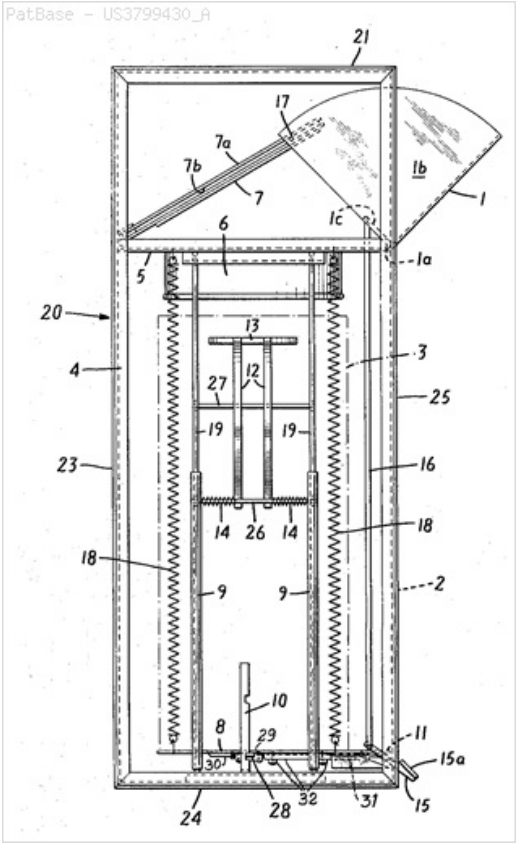
Classification Explorer

Cited documents: US3322477 A, US3204866 A, US3179332 A, US2634072 A, US2170677 A, US1511982 A, US1500964 A, US1160820 A,

Forward Citations: WO9220597, USD569074, US8448803, US5884556, US5176315, US5147056, US5137212, US5082171, US4911325, US4065051, US2011120997, US2006283929, FR2690144, FR2631252, FR2608460, DE3113704,

Abstract:
Source: US3799430A A receptacle particularly for household or industrial refuse comprises a cabinet having an upper door that swings downwardly and a larger lower door that swings outwardly. A platform in the cabinet at the level of the bottom of the upper door has a central hole surrounded by a downwardly projecting sleeve on which the mouth of a plastic **bag** can be fitted. A lower vertically movable platform and means for clamping the **bag** on the sleeve are interconnected so that the **bag** is clamped when the platform is raised to a position for supporting the bottom of the **bag**.

PatBase - US3799430_A



348) Family number: 987938 (US3635376A)

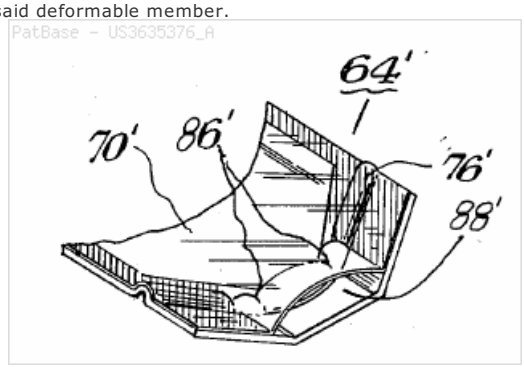
Title:	QUICK-**OPEN** FLEXIBLE **PACKAGE**
Priority:	US19700043717 19700605

Family:

Publication number	Publication date	Application number	Application date
US3635376 A	19720118	US19700043717	19700605

Probable Assignee:	HELLSTROM HAROLD R
Assignee(s):(std)**:**	HELLSTROM HAROLD R
Assignee(s):	SPECTOR ERIC S ; PROCTER AND GAMBLE CO ; HAROLD RICHARD HELLSTROM
Inventor(s):(std)**:**	HELLSTROM HAROLD RICHARD
Inventor(s):	HAROLD RICHARD HELLSTROM
International class (IPC 8-9):	B65D75/30 B65D75/58 B65D75/60 (Advanced/Invention); B65D75/28 B65D75/52 (Core/Invention)
International class (IPC 1-7):	B65D35/08 B65D6/00 B65D85/56
CPC:	B65D75/30 B65D75/58 B65D2575/586
European class:	B65D75/30 B65D75/58 L65D575/58R
US class:	206/469 206/56 222/107 222/498 222/541.1 222/541.6 229/125.35
Classification Explorer	
Cited documents:	US3498448 A, US3405849 A, US3275291 A, US3272248 A, US3184121 A,
Forward Citations:	WO9910252, WO9005680, WO8602908, WO12045424, WO09088537, WO07116054, WO05086948, WO05086948, WO0176973, WO0176973, USRE44458, USRE41273, USRE34087, USD728094, USD726900, USD654790, US9850046, US9802745, US9694965, US9617024, US9527636, US9468584, US9415918, US9375292, US9365339, US9211538, US9205222, US9108192, US9016521, US8919594, US8752730, US8701947, US8684968, US8684601, US8663188, US8651761, US8640920, US8590282, US8528736, US8523016, US8511500, US8485360, US8418883, US8366337, US8328017, US8181818, US8176713, US8002468, US7909165, US7806877, US7757893, US7644821, US7607534, US7552823, US7506762, US7422125, US7073692, US7004354, US6357631, US6244468, US5839609, US5494192, US5395031, US5344018, US5184896, US5174658, US5131760, US5111932, US5072855, US5018646, US4988016, US4928852, US4898477, US4890744, US4798324, US4724982, US4718556, US4611715, US4593408, US4592493, US4493574, US4335815, US4328912, US4301926, US4294361, US4236652, US3811564, US3782601, US3756386, US2017259984, US2017166337, US2016059998, US2015175284, US2015122840, US2014299624, US2014197202, US2014000735, US2013341350, US2013327672, US2013261608, US2013228591, US2013121749, US2012312709, US2011269611, US2011200275, US2011097393, US2011036056, US2011024462, US2010326989, US2010308051, US2010300901, US2010278462, US2010179473, US2010150481, US2010116772, US2010065582, US2009171311, US2009129706, US2008212904, US2008149667, US2008039812, US2008003049, US2007295766, US2007286535, US2007284375, US2007241024, US2007237431, US2007235369, US2007235357, US2007068845, US2007059405, US2006283727, US2006278667, US2006113320, US2006086642, US2006081648, US2005184088, US2005006404, US2004134826, JP2011509224, FR2540072, EP2679307, EP2439149, EP2363116, EP2238044, EP1990290, EP1551716, EP0496587, EP0255750, EP0255750, EP0226290, EP0192348, EP0192348, EP0183064, EP0115990, DE19962436, DE19962436, DE102007059533, AU579425, AU574511,

Abstract:
Source: US3635376A I disclose a quick-**open** **container** structure comprising a pair of sheet members, means for peripherally **sealing** said sheet members to define a containment section therebetween, said peripheral **sealing** means being interrupted to define a relatively narrowed **dispensing** channel, extending from said containment section to an edge of said structure, at least one of said sheet members being sufficiently flexible to permit deformation at said containment section to extrude the contents thereof through said **dispensing** channel, a deformable member mounted on one of said members and disposed to block said **dispensing** channel in the undeformed condition of said deformable member, means for stretching said one flexible member over said deformable member in its nondeformed condition to **seal** said containment section, said deformable member being shaped to loosen said one flexible member in the deformed condition of said deformable member.



349) Family number: 1317060 (US3642248A)

Title: **SEALING** MECHANISM

Priority: CA19700082184 19700507 CA19730173944 19730613 US19690822593 19690507 CA19730173945 19730613

Family:

Publication number	Publication date	Application number	Application date
CA936515 A1	19731106	CA19700082184	19700507
CA950885 A1	19740709	CA19730173944	19730613
CA950885 A2	19740709	CA19730173944	19730613
CA950886 A1	19740709	CA19730173945	19730613
CA950886 A2	19740709	CA19730173945	19730613
GB1316482 A	19730509	GB19700021436	19700504
GB1317136 A	19730516	GB19700003226	19700122
GB1317137 A	19730516	GB19700003546	19700504
US3642248 A	19720215	US19690822593	19690507

Probable Assignee: WILLIAM STIX WASSERMAN

Assignee(s):(std)**:** ALLEN AND CO FOF PROPRIETARY FUN ; POSI SEAL INT ; POSI SEAL INTERNAT ; WILLIAM STIX WASSERMAN ; ROBIN HARKAS ; POSI SEAL INTERNATIONAL

Assignee(s): ROBERT E BENWARE ; POSI SEAL INTERNATIONAL INC ; STATE STREET BANK AND TRUST CO ; POSI SEAL INT INC ; POSI SEAL INT INC A CORP OF DE ; ALLEN AND CO FOF PROPRIETARY FUNDS LTD ; BENWARE ROBERT E

Inventor(s):(std)**:** BENWARE R ; BENWARE ROBERT E ; BENWARE ROBERT EDGAR

Inventor(s): ROBERT EDGAR BENWARE ; ROBERT E BENWARE

International class (IPC 8-9): F16K1/226 F16K1/36 F16K3/10 F16K3/12 F16K5/06 F16K5/14 (Advanced/Invention); F16K1/226 F16K1/32 F16K3/02 F16K5/00 F16K5/06 (Core/Invention)

International class (IPC 1-7): F16K1/226 F16K1/34 F16K1/36 F16K3/10 F16K3/12 F16K5/06 F16K5/14

CPC: F16K1/2266 F16K1/36 F16K3/12 F16K5/0673

European class: F16K1/226C3 F16K1/36 F16K3/12 F16K5/06J3

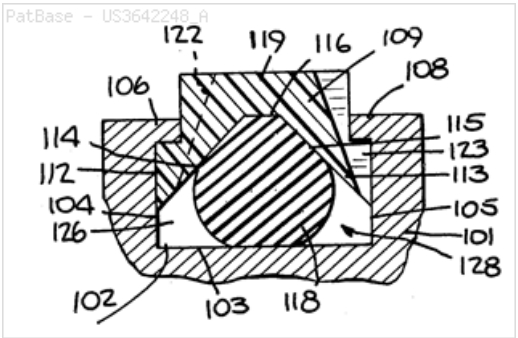
US class: 251/172 251/174 251/175 251/176

Classification Explorer

Cited documents: US3409269 A, US3166291 A, US3160387 A, US2938704 A, US2889134 A, US2585556 A, US2349170 A, US2109042 A, CA616199 A,

Forward Citations: WO9105707, WO9105707, WO13124546, WO12103252, WO02086356, WO02086356, US9587747, US9145973, US9127775, US9033054, US8528880, US8523144, US8500090, US8336890, US7651071, US7296585, US7080820, US6641141, US6616973, US5839717, US5618024, US5535986, US5467689, US5388806, US5294091, US5181690, US4872642, US4779841, US4744572, US4632360, US4623121, US4527773, US4508315, US4362184, US4331319, US4306706, US4290453, US4266752, US4258901, US4248404, US4241895, US4237933, US4226428, US4213483, US4195815, US4165859, US4145026, US4088299, US3986699, US2017227130, US2016258541, US2015083955, US2014291566, US2014191151, US2013341548, US2012319022, US2012032405, US2012025118, US2011233438, US2009277642, US2009101858, US2008272324, US2007114483, US2006202428, US2003062500, JP56076765, JP53130525, JP49038040, JP2005537449, GB2175372, GB2175372, GB2116679, FR2987094, FR2415760, ES2327020, EP2047166, EP0843129, EP0843129, EP0474318, EP0471270, EP0278675, EP0253794, EP0134503, EP0025402, DE3844316, DE3806912, DE3219309, DE2811035, DE2529509, CN103363134, CN102943885, AU594795,

Abstract:
Source: US3642248A This disclosure is directed to a **sealing** machine for **sealing** a first member and a second member against the flow of system pressure. In this mechanism a wear ring is used which is comprised of a seating surface and a flange area which cooperates with the flanges of a groove located in the first member to lock said wear ring in said groove. A backing ring is generally disposed in said groove, beneath the wear ring and is locked within said groove by said wear ring. The backing ring serves to force or preload said seating surface of said wear ring against said second member when the **sealing** mechanism is closed. The backing ring may be eliminated in an embodiment of the invention wherein the wear ring is so adapted to provide its own preloading force and the additional preload of the backing ring is not needed. In one embodiment of the invention the backing ring acts as a **seal** against system pressure trying to leak under and around said wear ring. Furthermore, provision is made to communicate system pressure into said groove behind said wear ring to aid the backing ring in urging said wear ring against said second member. The backing ring preload and the system pressure communicated into said groove combine to create a piston action on the widest part of said wear ring which causes to amplified force on the narrower seating surface which is in contact with the second member.



350) Family number: 992899 (US3643586A)

Title:	ASEPTIC **PACKAGING** OF FOODS
Priority:	BE19720114184 19720221 US19700053087 19700708 US19710196837 19711108

Family:

Publication number	Publication date	Application number	Application date
BE779629 A	19720616	BE19720779629	19720221
US3643586 A	19720222	US19700053087	19700708
US3891779 A	19750624	US19710196837	19711108

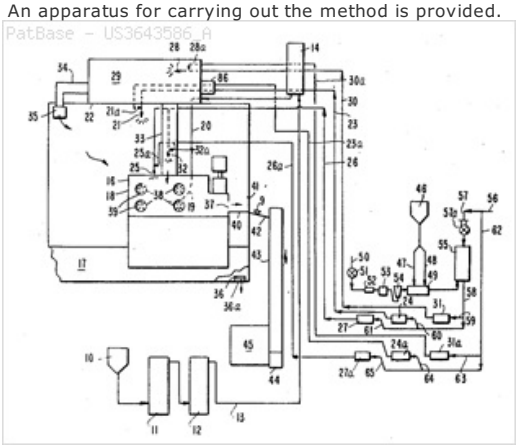
Probable Assignee:	ROSINI DONALD A
Assignee(s):(std)**:**	DAVID V ROBINSON ; DONALD A ROSINI ; ROBINSON DAVID V ; ROSINI DONALD A
Assignee(s):	ROBINSON DAVID V P O BOX 232 ROUTE 1 LAUREL MARYL ; ROBINSON DAVID V P O BOX 232 ROUTE 1 LAUREL MARYLAND E U A
Inventor(s):(std)**:**	ROBINSON D V ; ROBINSON DAVID V
Inventor(s):	D V ROBINSON ; DAVID V ROBINSON ; DV ROBINSON
International class (IPC 8-9):	A23L3/02 B65B55/02 B65B55/06 (Advanced/Invention); A23L3/02 B65B55/02 B65B55/04 (Core/Invention)
International class (IPC 1-7):	A23L3/00 A23L3/02 B65B31/02 B65B55/06
CPC:	A23L3/02 B65B55/027 B65B55/06
European class:	A23L3/02 B65B55/02D B65B55/06
US class:	422/28 422/37 426/399 53/510 53/86 53/860 992/490

Classification Explorer

Cited documents:	US3529977 A, US3501213 A, US3376689 A, US3167437 A, US3035886 A, US2541113 A, US2309007 A,
Forward Citations:	WO9710995, WO9413328, WO9412062, WO9107994, WO08037326, WO08037326, WO07072575, USD799136, USD795606, US9683978, US9637260, US9636274, US9591864, US9302847, US9138497, US8181429, US7798104, US7491371, US7396553, US7329385, US7001631, US6945013, US6843037, US6718735, US6702985, US6682696, US6638476, US6557319, US6536188, US6475435, US6209591, US6168818, US6032573, US5972405, US5908651, US5720148, US5637343, US5555702, US5293753, US5088293, US4880581, US4873094, US4597945, US4560567, US4208852, US4175140, US4120984, US4056921, US3992850, US2015320263, US2015230492, US2014356493, US2014196407, US2013318913, US2013316062, US2012073250, US2011000439, US2010205908, US2010162662, US2010111760, US2009196969, US2009123330, US2008072840, US2007274878, US2006075721, US2006008383, US2005260096, US2005097863, US2005019473, US2004159574, US2004035089, US2004022907, US2003113414, US2002029543, JP5015233, JP2009532294, EP1647488, EP1647488, EP1224120, AU633740,

Abstract:

Source: US3643586A A method is provided for producing an aseptically **packaged** food product in which the food is sterilized and then **packaged** under aseptic conditions in presterilized **containers**. An apparatus for carrying out the method is provided.



351) Family number: 995204 (US3647305A)

© PatBase

Title: PACKET TECHNOLOGY

Priority: US19690806983 19690313 US19700080214 19701012

Family:

Publication number	Publication date	Application number	Application date
US3647305 A	19720307	US19690806983	19690313
US3903345 A	19750902	US19700080214	19701012

Probable Assignee: BAKER ROBERT C

Assignee(s):(std)**:** BAKER ROBERT C ; MARY JOAN H BAKER ; ROBERT C BAKER

Inventor(s):(std)**:** BAKER MARY JOAN H ; BAKER ROBERT C

Inventor(s): MARY JOAN H BAKER ; ROBERT C BAKER

International class (IPC 8-9): A45D40/26 A47L13/16 A47L23/10 (Advanced/Invention); A45D40/26 A47L13/16 A47L23/00 (Core/Invention)

International class (IPC 1-7): A46B5/02 A46B5/04 B32B27/12 B32B27/36 B32B33/00 B32B5/16

CPC: Y10S383/902 Y10S428/913 A45D40/26 A47L23/10 Y10T428/1334 Y10T428/24843 Y10T428/2826 Y10T428/23943 Y10T428/23993 Y10T428/31786 Y10T428/31797 Y10T442/675 B32B27/08 A47L13/16 B32B27/36 B32B33/00 B32B2307/31 B32B2367/00 B32B2439/00

European class: A45D40/26 A47L13/16 A47L23/10

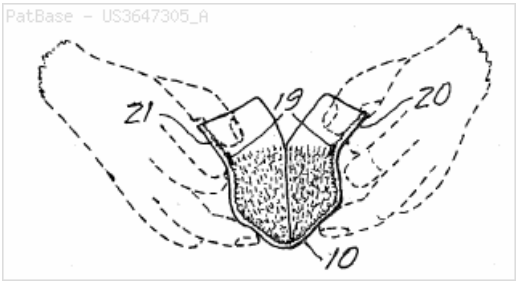
US class: 206/216 206/484 206/56AA 383/4 383/902 401/132 401/7 428/200 428/287 428/349 428/35.2 428/480 428/483 428/90 428/913 428/97 442/395

Classification Explorer

Cited documents: US3529986 A, US3455720 A, US3411967 A, US3369267 A, US3325332 A, US3280420 A, US3275487 A, US3257743 A, US3252732 A, US3190436 A, US3176338 A, US2997166 A, US2992149 A, US2954116 A, US2688577 A, US2474619 A, US2446414 A, US2232783 A,

Forward Citations: WO8503275, WO0249477, WO0213655, WO0213655, WO0032321, USD427371, US9566421, US9089196, US8979785, US8911771, US8858484, US8641684, US8591130, US8480968, US8361408, US7794675, US7484261, US7214336, US6902335, US6862759, US6702733, US6547614, US6531197, US6406206, US6325565, US6322271, US6315482, US6286246, US6250829, US6075682, US6007264, US5980960, US5645903, US5562642, US5540921, US5460620, US5368581, US5320531, US5316400, US5254109, US5242433, US5046608, US4696393, US4427115, US4427111, US4140409, US4065826, US3806260, US3776644, US2014209118, US2011125104, US2010168638, US2010168637, US2010162948, US2008039803, US2008038167, US2007297275, US2007225660, US2007134045, US2007093762, US2006194041, US2006115520, US2006068199, US2006067964, US2006064830, US2005207821, US2005082197, US2004089320, US2004047953, EP0890328, EP0753280, EP0615744, EP0615744, EP0546426,

Abstract:
Source: US3647305A A disposable flexible envelopelike **container** and a new sheet material are taught. The **container** is convertible to a pocket applicator for applying **packaged** messy spreadable compositions such as various polishes, cleaners, pastes, oils, paints, stains, waxes, and many other compositions.



352) Family number: 995833 (US3648429A)

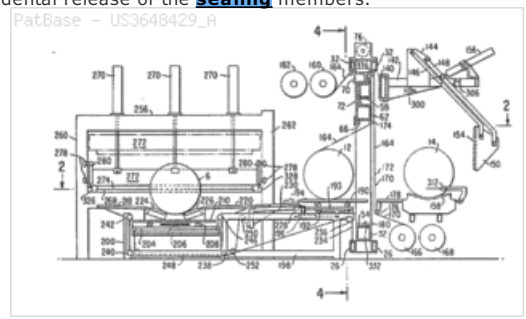
Title:	**PACKAGING** MACHINE
Priority:	US19690887558 19691223

Family:

Publication number	Publication date	Application number	Application date
US3648429 A	19720314	US19690887558	19691223

Probable Assignee:	CURTIS MARBLE MACHINE CO
Assignee(s):(std)**:**	CURTIS MARBLE MACHINE CO
Assignee(s):	CURTIS AND MARBLE MACHINE CO
Inventor(s):(std)**:**	ARSENAULT JAMES H ; DAVIDSON RALPH L
Inventor(s):	JAMES H ARSENAULT ; RALPH L DAVIDSON
International class (IPC 8-9):	B65B51/14 (Advanced/Invention); B65B51/10 (Advanced/Non-invention); B65B51/14 (Core/Invention); B65B51/10 (Core/Non-invention)
International class (IPC 1-7):	B65B11/12 B65B11/48 B65B51/14 B65B51/30
CPC:	B65B51/14 B65B2051/105
European class:	B65B51/14 L65B51/10C
US class:	53/229 53/374.8 53/548 53/74 53/77 53/770 532/290
Classification Explorer	
Cited documents:	US3503175 A, US3396506 A, US3237371 A, US3191356 A,
Forward Citations:	US7392639, US7368677, US7331162, US5620542, US4018031, US2007131526, US2007130892, US2005193685, EP0294339,

Abstract:
Source: US3648429A Apparatus for wrapping bundles in heat-**sealable** plastic sheet material and **sealing** the plastic along the side and ends of the bundle. A vertically adjustable side **sealing** mechanism adapts itself to different size bundles, and the end **sealing** mechanism automatically is adjusted to perform its end **sealing** at a horizontal diametrical plane the same as the side **sealing** is done and at a constant height above floor level. Additional pressure applying means are provided to insure proper **sealing** along elongated bodies, as well as safety latches to prevent accidental release of the **sealing** members.



353) Family number: 996896 (US3650088A)

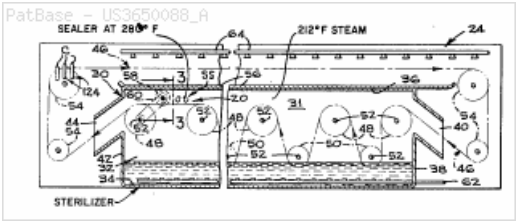
Title:	**SEALING** METHOD AND APPARATUS
Priority:	US19690860335 19690923

Family:

Publication number	Publication date	Application number	Application date
US3650088 A	19720321	US19690860335	19690923

Probable Assignee:	FMC CORP
Assignee(s):(std):	FMC CORP ; TASCHER E US
Inventor(s):(std):	WILSON DONALD C
Inventor(s):	DONALD C WILSON
International class (IPC 8-9):	B65B51/14 (Advanced/Invention); B65B51/14 (Core/Invention)
International class (IPC 1-7):	B65B51/14 B65B55/06 B65B7/06
CPC:	B65B51/146
European class:	B65B51/14D
US class:	156/381 53/127 53/167 53/374.5 53/374.6 53/89 53/890
Classification Explorer	
Cited documents:	US3488914 A, US3430414 A, US3230687 A, US3182432 A, US2441940 A, US2277288 A,
Forward Citations:	US9879898, US8720221, US7900465, US7870754, US5857312, US4409775, US3991543, US3845606, US3830681, US2011094255, US2011000238, US2011000237, US2010326102, US2010126204, US2010030383, US2009266090, US2009145158, US2009038331, US2008104977, US2006266059, US2006260345, US2006090496,

Abstract:
Source: US3650088A A high-dwell, high pressure, and low temperature method and apparatus for **sealing** heat **sealable** flexible **containers**. The flexible **containers** are **sealed** before moving out of a sterilizing chamber maintained at a sterilizing temperature of between about 212 degrees and 250 degrees F. **Sealing** bars are heated to a temperature of between about 250 degrees and 300 degrees F., and are clamped against the **container** at a pressure above 100 p.s.i., preferably about 250 p.s.i. for a period of between 2 to 6 seconds, preferably about 4 seconds.



354) Family number: 1095724 (US3652174A)

Title: HERMETICALLY-**SEALED** PRODUCTS AND RELATED METHOD FOR CLEANSING AND OTHER USES

Priority: US19670678600 19671027 US19680715768 19680325 US19720257745 19720530 US19720236072 19720320 US19700048916 19700618 US19720238578 19720327 US19730334309 19730221 US19720678600 19721027 US19730428225 19731226 US19730356143 19730501

Family:

Publication number	Publication date	Application number	Application date
US3652174 A	19720328	US19680715768	19680325
US3707945 A	19730102	US19700048916	19700618
US3744448 A	19730710	US19720238578	19720327
US3796185 A	19740312	US19720236072	19720320
US3824953 A	19740723	US19730356143	19730501
US3830198 A	19740820	US19730334309	19730221
US3837595 A	19740924	US19730428225	19731226

Probable Assignee: HYGIENE SYSTEMS INC

Assignee(s):(std)**:** BOONE P ; PHILIP BOONE

Assignee(s): BOONE P US ; HYGIENE SYSTEMS INC

Inventor(s):(std)**:** BOONE P ; BOONE PHILIP

Inventor(s): PHILIP BOONE ; BOONE P US

International class (IPC 8-9): A47K10/16 A47K10/32 A47K10/40 A47K10/42 A47K5/04 B65D83/14 B65D83/16 B65H35/00 (Advanced/Invention); A47K10/00 A47K10/24 A47K5/00 B65D83/14 B65D83/16 B65H35/00 (Core/Invention)

International class (IPC 1-7): A47K10/32 B05C1/06 B05C11/02 B05C11/12 B05C5/00 B43K5/14 B65D5/72 B65D85/00 B65H19/06 B65H35/00 D06B1/12

CPC: A47K2010/328 B65D83/20 B65D83/384 B65H35/0046 A47K5/04 A47K10/40 A47K10/16 Y10S242/905 A47K10/421 A47K10/32 A47K2010/3266

European class: A47K10/16 A47K10/32 A47K10/40 A47K10/42B A47K5/04 B65D83/14L5 B65D83/16B B65H35/00B2D K47K10/32W K47K10/32W1A

US class: 118/200 118/234 118/242 118/264 118/325 118/37 118/41 118/415 118/506 118/7.5 118/75 206/225 206/499 211/119 221/69 222/490 242/55.3 242/560 242/594.5 242/595 242/598.5 242/905 248/317 312/42 396/604 401/132 401/143

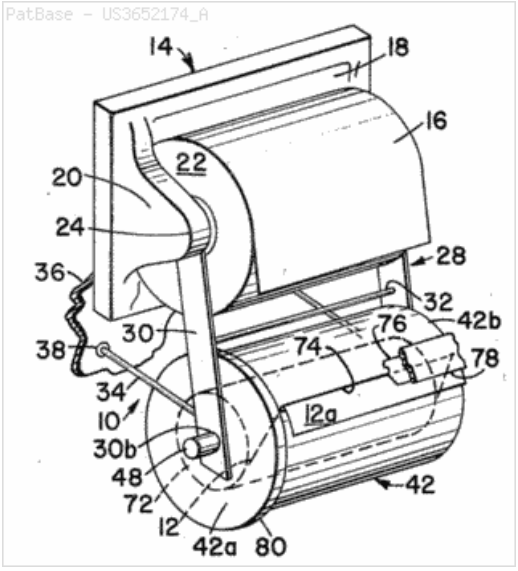
Classification Explorer

Cited documents: US697761 A, US3642336 A, US3640629 A, US3637276 A, US3523653 A, US3486504 A, US3472675 A, US3466131 A, US3441353 A, US3432245 A, US3412664 A, US3396836 A, US3396650 A, US3386619 A, US3350993 A, US3334374 A, US3314792 A, US3310353 A, US3281032 A, US3265246 A, US3259287 A, US3250202 A, US3165776 A, US3152515 A, US3151822 A, US3103866 A, US3100066 A, US3086724 A, US3063601 A, US3060486 A, US3049310 A, US2961677 A, US2936932 A, US2854905 A, US2821436 A, US2806591 A, US2801131 A, US2790608 A, US2746798 A, US2726825 A, US2685365 A, US2663461 A, US2565994 A, US2560065 A, US2546597 A, US2308168 A, US1336140 A, US1101924 A, GB7721, GB646075 A, GB189907721 A, GB1016053 A, CH368590 A,

Forward Citations: WO9808763, WO9804486, WO9603069, WO9219141, WO9004246, WO15171634, WO12155346, WO10014962, WO08042936, WO07080207, WO0189937, WO0176439, WO0035327, WO0007490, WO0000071, WO0000071, USRE45809, USD806556, USD669716, USD655116, USD634138, USD506632, USD462215, USD457765, US9877901, US9751673, US9675766, US9539171, US9463287, US9375745, US9168340, US8910826, US8827116, US8668664, US8622952, US8550296, US8444007, US8418879, US8398041, US8328046, US8251232, US8205769, US8192841, US7924142, US7914891, US7850041, US7726513, US7694848, US7654412, US7559434, US7517582, US7497351, US7481395, US7442439, US7430886, US7380689, US7357350, US7354598, US7354480, US7306677, US7294378, US7293738, US7264414, US7207461, US7188799, US7140513, US7140513, US7128235, US7128235, US7070143, US7063245, US7059493, US7040502, US7011272, US6997345, US6997342, US6976605, US6969024, US6945493, US6929148, US6857540, US6827309, US6785946, US6745975, US6736287, US6706352, US6705565, US6702227, US6702225, US6688551, US6682013, US6655630, US6631869, US6626395, US6613144, US6588626, US6568625, US6540195, US6537631, US6497345, US6460799, US6460697, US6457893, US6457434, US6446808, US6439386, US6419217, US6382552, US6378800, US6346153, US6343491, US6328255, US6309115, US6279865, US6273359, US6059882, US6047920, US5897074, US5891257, US5829278, US5765717, US5752622, US5623880, US5618008, US5539424, US5456421, US5443084, US5439521, US5375616, US4991538, US4834316, US4798312, US4762124, US4598664, US4385733, US4258863, US4235333, US4106617, US4106616, US4090642, US3980203, US3943859, US3910229, US3826259, US3804061, US2017164793, US2016227969, US2015335540, US2015230672, US2014367298, US2014103133, US2013200204, US2012261506, US2012261505, US2012181297, US2011284567, US2011204082, US2011127287, US2011024586, US2010243669, US2010155410, US2009325838, US2009217870, US2009065521, US2009031952, US2008272332, US2008169411, US2008145644, US2008145426, US2008142542, US2008135675, US2008087680, US2008078857, US2008067185, US2007289988, US2007278242, US2007278241, US2007272701, US2007202185, US2007202184, US2007157877, US2007149435, US2007148459, US2007148448, US2007148447, US2007148446, US2007148198, US2007145619, US2007145618, US2007145617, US2007145326, US2007144428, US2007045334, US2007044928, US2006283873, US2006201844, US2006003946, US2005284881, US2005178781, US2005166841, US2005159326, US2005056657, US2005039293, US2005035141, US2005029280, US2004251590, US2004251292, US2004245267, US2004245266, US2004144884, US2004124203, US2004124202, US2004120988, US2004099680, US2004099679, US2003218040, US2003111481, JP56174593, JP55070897, JP54151743, JP54103355, JP52017962, GB2270901, GB2252954, FR2653983, FR2641876, FR2554700, EP0978247, EP0953312, EP0860137, EP0365473, CN106638117,

Abstract:
Source: US3652174A Products including hermetically **sealed**, **openable**, **containers** enclosing liquid, liquid impregnated, dry and other materials for use alone or in combination with associated or integral components such as sheetlike materials for cleaning, medical or other purposes, together with **dispensing** components therefor and related method.

PatBase - US3652174_A



355) Family number: 998541 (US3652935A)

Title:	ELECTRICAL CURRENT MEASUREMENT AND RAPIDLY LOCATING AND POSITIVELY IDENTIFYING CATHODES HAVING ABNORMAL ELECTRICAL CONDITIONS ASSOCIATED THEREWITH IN AN ELECTROLYTIC COPPER REFINING PROCESS TANKHOUSE
Priority:	US19700001108 19700107 US19710198513 19711115 US19710198589 19711115

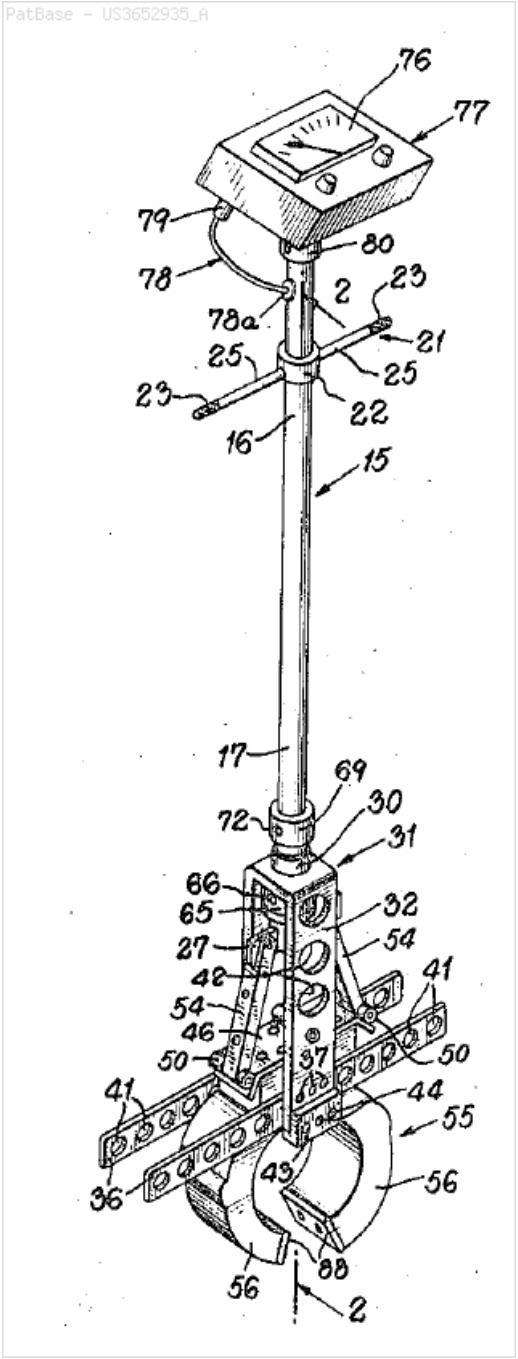
Family:

Publication number	Publication date	Application number	Application date
US3652935 A	19720328	US19700001108	19700107
US3753104 A	19730814	US19710198513	19711115
US3793166 A	19740219	US19710198589	19711115

Probable Assignee:	AMERICAN SMELTING REFINING
Assignee(s):(std)**:**	AMERICAN SMELTING REFINING
Assignee(s):	AMERICAN SMELTING REFINING CO US ; AMERICAN SMELTING AND REFINING CO ; AMERICAN SMELTING AND REFINING CO US
Inventor(s):(std)**:**	SHAW F ; SHAW FRANK D
Inventor(s):	SHAW F US ; FRANK D SHAW
International class (IPC 8-9):	C25C7/06 G01R15/18 H01F38/30 (Advanced/Invention)
International class (IPC 1-7):	C22D1/16 C25C7/06 G01R1/22 G01R19/00 G01R33/00
CPC:	C25C7/06 G01R15/186 H01F38/30
European class:	C25C7/06 G01R15/18D H01F38/30
US class:	204/108 205/337 205/574 324/11.4 324/114 324/117H 324/117R 324/127 324/149
Classification Explorer	
Cited documents:	US3626291 A, US3465250 A, US2345430 A, FR991779 A, DE926021 A,
Forward Citations:	WO16125065, WO14032085, WO05090639, WO05090639, WO03000960, USD514005, US8159211, US8074324, US7884598, US7550068, US7470356, US7445696, US7122109, US7122109, US7088090, US6975104, US6956364, US6910304, US6771058, US6714000, US6560942, US6374565, US6345482, US6321503, US6023880, US4799005, US4394619, US4386280, US4283678, US2011241720, US2011101960, US2009184207, US2009058399, US2007284262, US2006213766, US2005218001, US2005217999, US2005184722, US2005162148, US2005022465, US2004263149, US2004232002, US2003182879, US2003011362, KR100840163, GB2291273, FR2982673, EP2592426, EP1276121, EP0589729, EP0589729, EP0018921, AU2005224674,

Abstract:
Source: US3652935A Cathodes having abnormal electrical conditions associated therewith in an electrolytic copper refinery tankhouse are rapidly and positively identified to enable the early remedying of the abnormal condition or conditions, for instance short circuited cathodes or poor contacts, by closing the normally **open**, cathode bar receptive, pivotally mounted, automatically closeable and automatically **openable** jaws of a sensing head of an electrical current measuring instrument, or of the sensing heads of a plurality of current measuring instrument **units** depending from a common supporting means of a current measuring apparatus, about one or more of a plurality of spaced apart cathode bars in the tankhouse and from which the cathodes are suspended and immersed in the electrolyte. The sensing head jaws are closed about the cathode bars by lowering the instrument or apparatus whereby shoes of the instrument's operating mechanism are forcefully applied against the cathode bar or bars due to the weight of instrument or apparatus parts, thereby automatically closing the jaws of the sensing head or heads to substantially encompass the cathode bar or bars. The current passing through each cathode bar is measured by utilizing the magnetic field created by the current passing through the cathode bar to induce a measurable e.m.f. and a measurable electrical current in conductive coils on nonmagnetic cores of the sensing head jaws in a preferred embodiment. The current measurement value for the cathode bar or each of the cathode bars is compared with a predetermined desired current measurement value for its suspended cathode thereby positively identifying any cathode or cathodes having an abnormal electrical condition or conditions associated therewith.

PatBase - US3652935_A



356) Family number: 127634 (GB1337069A)

Title: METHOD AND APPARATUS FOR INSERTING AND REMOVING OBJECTS THROUGH A WALL **OPENING** WITHOUT CONTAMINATIONS

Priority: DE19702064244 19701229

Family:

Publication number	Publication date	Application number	Application date
BE777478 A	19720417	BE19710777478	19711229
DE2064244 A1	19720713	DE19702064244	19701229
DE2064244 B2	19790104	DE19702064244	19701229
DE2064244 C3	19790906	DE19702064244	19701229
FR2120085 A3	19720811	FR19710047132	19711228
FR2120085 A7	19720811	FR19710047132	19711228
FR2120085 B3	19740215	FR19710047132	19711228
GB1337069 A	19731114	GB19710060102	19711223
NL175240 B	19840501	NL19710017460	19711220
NL175240 C	19841001	NL19710017460	19711220
NL7117460 A	19720703	NL19710017460	19711220

Probable Assignee: KERNFORSCHUNG GMBH GES FUER

Assignee(s):(std)**:** F KERNFORSCHUNG MBH GES ; GES ; KERNFORSCHUNG GMBH GES F ; KERNFORSCHUNG M B H ; KERNFORSCHUNGSZ KARLSRUHE ; KERNFORSCHUNG GMBH GES FUER

Assignee(s): KERNFORSCHUNGSZENTRUM KARLSRUHE GMBH TE KARLSRUHE ; KERNFORSCHUNGSZENTRUM KARLSRUHE GMBH ; KERNFORSCHUNGSZENTRUM KARLSRUHE GMBH 7500 KARLSRUHE ; KERNFORSCHUNGSZENTRUM KARLSRUHE GMBH TE KARLSRUHE BONDSREPUBLIEK DUITSLAND ; KERNFORSCHUNG MBH ; KERNFORSCHUNG MBH GES FUER ; GESELLSCHAFT FUR ; KERNFORSCHUNG GMBH DT ; FUR GES

Inventor(s):(std)**:** BOEHME GEORG DIPL ING ; WOHNLICH HELMUT ; WOHNLICHI H

Inventor(s): WOHNLICH HELMUT 7504 WEINGARTEN ; BOEHME GEORG DIPL ING 7501 LEOPOLDSHAFEN ; H WOHNLICHI

International class (IPC 8-9): G21F7/005 (Advanced/Invention); G21F7/005 (Core/Invention)

International class (IPC 1-7): B25J21/00 G21F5/00 G21F7/00

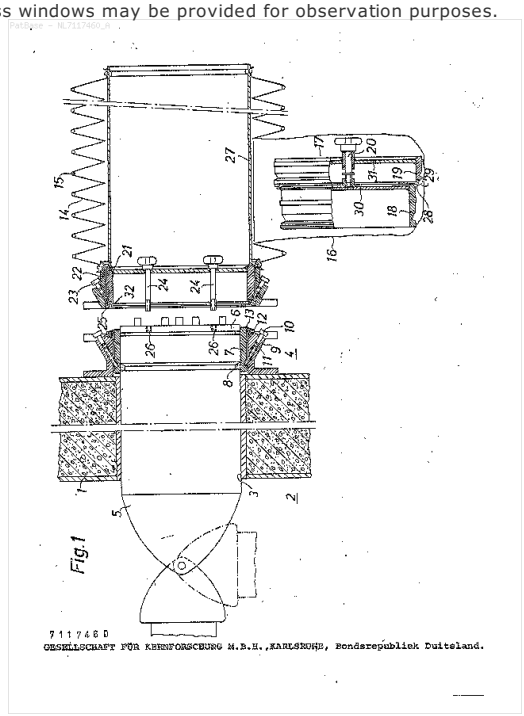
CPC: G21F7/005

European class: G21F7/005

Classification Explorer

Forward Citations: US4643328, FR2573909, EP0187558, DE3934638, DE3934638, DE2309185,

Abstract:
Source: GB1337069A 1337069 Shielded enclosures GESELLSCHAFT FLIER KERNFORSCHUNG mbH 23 Dec 1971 [29 Dec 1970] 60102/71 Heading B4Q The screening wall 1 of a hot cell 2 has an **opening** 3 through which a manipulator 5 extends, a **cover** 6 of the manipulator being secured to a tube 7 which is in turn secured in a flange 9 by bolts 10. In front of the **cover** 6 there is a bellows 14 made of a transparent material and including a pocket 16 containing a "double **cover**" system 17 comprising two parts 18, 19 interconnected by a screw coupling 20. At its end facing the **cover** 6, the bellows 14 has a **cover** 21 secured to a flange 22 by bolts 23. In order to remove the manipulator 5, the **covers** 6, 21 are coupled by means of screws 24 and the bolts 10, 23 are then released. Thereafter the length of the bellows 14 is increased (by hand or mechanically) and the "double **cover**" system formed by the **covers** 6, 21 completely withdrawn into the interior of the bellows together with the manipulator 5. Subsequently, the "double **cover**" system 17 in the pocket 16 is moved by hand to the **opening** 3 and inserted such that one part 18 fits into the flange 9 and the other part 19 fits into the flange 22, the parts being secured by the bolts 10, 23. The screw coupling 20 between the parts 18, 19 is then released and the two flanges 9, 22 are separated. Devices may be located within the bellows 14 which are actuated from the outside, by means of which the "double **cover**" system 17 or the manipulator 5 can be moved. It is possible to replace the bellows 14 by a telescopically extensible tube. When using a metal tube (e.g. on account of the gamma rays emanating from the **opening** 3), protected **openings** with lead glass windows may be provided for observation purposes.



357) Family number: 1001191 (US3657073A)

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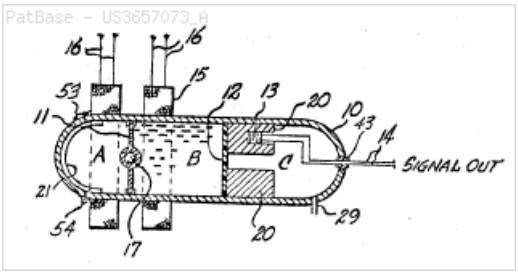
Title:	APPARATUS FOR DETECTING VIABLE ORGANISMS
Priority:	US19660549717 19660512

Family:

Publication number	Publication date	Application number	Application date
US3657073 A	19720418	US19660549717	19660512

Probable Assignee:	BOEING CO
Assignee(s):(std)**:**	BOEING CO
Assignee(s):	BOEING CO THE
Inventor(s):(std)**:**	BURTON GEORGE M ; CHRISTENSEN GERALD M ; PILGRIM ARTHUR J
Inventor(s):	ARTHUR J PILGRIM ; GEORGE M BURTON ; GERALD M CHRISTENSEN
International class (IPC 8-9):	C12M1/12 C12M1/34 (Advanced/Invention); C12M1/12 C12M1/34 (Core/Invention)
International class (IPC 1-7):	C12B C12K1/10
CPC:	C12M41/36
European class:	C12M1/12B C12M1/34
US class:	195/100 195/103.5 195/127 435/287.4 435/31 435/35
Classification Explorer	
Cited documents:	US3346464 A, US3239429 A, US2854384 A,
Forward Citations:	WO9806496, US7556767, US7322370, US7246627, US7150284, US6516818, US6516817, US6506346, US6494964, US6454874, US6394111, US5736355, US5455176, US4978502, US4859603, US4769333, US4596773, US4416984, US3935073, US3901765, US3893891, US3865548, US2008087309, US2005163655, US2004105780, US2003164182,

Abstract:
Source: US3657073A A three chamber sterilization efficiency detector having a first chamber containing viable organisms that are subjected to the sterilization process; a second chamber separated from the first by an **openable** partition containing nutrient media; and a third chamber separated from the second by a semi-permeable partition containing means for detecting the products of the life processes of the organisms. After sterilization, the **openable** partition is **opened** to allow the nutrient media to contact the organisms and support the life processes of any surviving organisms and the products of such life processes pass through the semi-permeable partition to be detected in the third chamber.



358) Family number: 1347821 (US3763620A)

Title: **PACKAGING** APPARATUS AND METHOD

Priority: CA19710126792 19711103 CA19740210522 19741001 CA19740210523 19741001 CA19740210524 19741001 DE19712165981 19711030 GB19700052465 19701104 NL19810004369 19810923

Family:

Publication number	Publication date	Application number	Application date
AR192591 A1	19730228	AR19710238831	19711103
AR201542 A1	19750331	AR19710238832	19711103
AT327804 B	19760225	AT19710009455	19711103
AT945571 A	19750415	AT19710009455	19711103
AU197135274 A1	19730510	AU19710035274	19711102
AU467894 B2	19751218	AU19710035274	19711102
BE774853 A	19720503	BE19710774853	19711103
BR7107348 A0	19730508	BR19710007348	19711103
BR7107349 A0	19730508	BR19710007349	19711103
BR7107354 A0	19730508	BR19710007354	19711103
CA958684 A1	19741203	CA19710126792	19711103
CA976515 A1	19751021	CA19740210523	19741001
CA976515 A2	19751021	CA19740210523	19741001
CA978161 A1	19751118	CA19740210522	19741001
CA978161 A2	19751118	CA19740210522	19741001
CA984352 A1	19760224	CA19740210524	19741001
CA984352 A2	19760224	CA19740210524	19741001
CH534611 A	19730315	CH19710015945	19711102
DE2154268 A1	19720510	DE19712154268	19711030
DE2154268 C2	19840719	DE19712154268	19711030
DE2165981 A1	19720907	DE19712165981	19711030
DE2165981 C2	19831124	DE19712165981	19711030
DK142806 B	19810202	DK19710005392	19711103
DK142806 C	19810831	DK19710005392	19711103
ES396629 A1	19740516	ES19710396629	19711103
FI52053 B	19770228	FI19710003111	19711101
FI52053 C	19770610	FI19710003111	19711101
FR2113531 A5	19720623	FR19710039430	19711103
GB1353157 A	19740515	GB19700052465	19701104
IT954187 A	19730830	IT19710030702	19711103
JP55013972 B4	19800412	JP19710086860	19711102
LU64198 A	19720517		19711103
NL171788 B	19821216	NL19710015121	19711103
NL171788 C	19830516	NL19710015121	19711103
NL7115121 A	19720508	NL19710015121	19711103
NL8104369 A	19820201	NL19810004369	19810923
NO134145 B	19760518	NO19710004071	19711103
NO134145 C	19760825	NO19710004071	19711103
US3763620 A	19731009	US19710194279	19711101

Probable Assignee: WR GRACE AND CO

Assignee(s):(std)**:** GRACE W R AND CO ; GRACE W R LTD ; GRACE AND CO

Assignee(s): GRACE AND CO W R ; GRACE CO W R ; GRACE W AND CO ; GIRAUDI GIORGIO A M ; GIRAUDI GIORGIO AM ; GRACE WR AND CO ; WR GRACE AND CO ; W R GRACE AND CO ; W GRACE AND CO ; W R GRACE AND CO US ; W R GRACE AND CO NEW YORK N Y US ; W R GRACE AND CO 10036 NEW YORK N Y US ; W R GRACE AND CO 3 HANOVER SQUARE NEW YORK N Y 1 ; W R GRACE AND CO TE NEW YORK ; W R GRACE AND CO 3 HANOVER SQUARE NEW YORK N Y 10004 E U A ; IMPERIALE NINO ; WR GRACE AND CO TE NEW YORK

Inventor(s):(std)**:** ALDO MARIA GIRAUDI GIORGIO ; DI GIORGIO ALDO MARIA GIRA ; GIRAUDI G ; GIRAUDI G A M ; GIRAUDI GIORGIO ; GIRAUDI GIORGIO A M ; GIRAUDI GIORGIO ALDO MARIA ; IMPERIALE N ; IMPERIALE NINO ; NINO IMPERIALE

Inventor(s): IMPERIALE NINO MILANO IT ; MARIA GIRAUDI GIORGIO ALDO ; IMPERIALE N IT ; GIRAUDI GIORGIO ALDO MARIA IT ; GIRAUDI GIORGIO AM ; GIRAUDI GIORGIO ALDO ; GIRAUDI G IT ; GIORGIO ALDO MARIA GIRA1DI ; GIORGIO ALDO MARIA GIRANDY AND NINO IMP ; GIORGIO ALDO MARIA GIRAUDI

International class (IPC 8-9): B65B31/02 B65B59/02 B65G47/52 (Advanced/Invention); B65B31/02 B65B59/00 B65G47/52 (Core/Invention)

International class (IPC 1-7): A22C B65B25/00 B65B25/06 B65B31/00 B65B31/02 B65B31/04 B65B35/24 B65B43/34 B65B5/04 B65B51/08 B65B53/04 B65B57/10 B65B57/12 B65B59/00 B65B67/12 B65D

CPC: B65B31/024 B65B59/02 B65G47/52

European class: B65B31/02E B65B59/02 B65G47/52

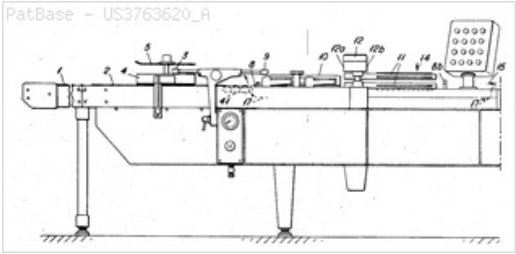
US class: 53/417 53/434 53/507 53/512 53/86

Classification Explorer

Cited documents: US3252267 A, US3055010 A, US3029571 A, US2924924 A, US2850856 A, US2580833 A, US2227398 A, FR460070 A, FR1574369 A, FR1486874 A, DE1950236 A1, DE1063519 B,

Forward Citations: US7603833, US7392637, US6955029, US2015040520, US2008229717, US2006266005, US2005229547, US2004040262, US2003101691, EP1324922, EP1197433, DE3151464, DE3151463, DE3123768, CN102219057, AU2001294078,

Abstract:
Source: US3763620A The invention relates to an automated vacuum bagging and **sealing** **unit**. In the device the size of an article is measured to determine the appropriate **bag** size and the article is then fed to a mechanically spreading **bag** holding guide. The filled **bag** is conveyed to a vacuum chamber including partial confinement bars and final gathering studs to effect clipping under high vacuum.


PatBase - US3763620_A

359) Family number: 18999022 (GB1355699A)

Title: **PACKAGING** AND DISPLAY **UNITS**

Priority: FR19700041891 19701113 FR19710002522 19710121 FR19710037398 19711011 FR19710017256 19710505 FR19710002522 19710126

Family:

Publication number	Publication date	Application number	Application date
BE775253 A	19720512	BE19710775253	19711112
CH552518 A	19740815	CH19710015913	19711101
DE2156570 A1	19720622	DE19712156570	19711115
ES208392 U	19760401	ES19710208392U	19711111
ES208392 Y	19760716	ES19710208392U	19711111
FR2113812 A3	19720630	FR19700041891	19701113
FR2113812 A7	19720630	FR19700041891	19701113
FR2113812 B3	19731130	FR19700041891	19701113
FR2123648 A5	19720915	FR19710002522	19710126
FR2135517 A2	19721222	FR19710017256	19710505
FR2135517 B2	19730511	FR19710017256	19710505
FR2157113 A6	19730601	FR19710037398	19711011
GB1355699 A	19740605	GB19710051768	19711108
IT945904 A	19730510	IT19710013033	19711111
NL7115544 A	19720516	NL19710015544	19711112

Probable Assignee: SCHNERB JEAN

Assignee(s):(std)**:** GEN ALIMENTAIRE ; GEN ALIMENTAIRE SA ; GENERALE ALIMENTAIRE ; SCHNERB JEAN ; SCHNERD JEAN ; GENERALE ALIMENTAIRE SA

Assignee(s): GENERALE ALIMENTAIRE 164 AVENUE DE NEUILLY F 92 NEUILLY S SEINE FRANCE ; SCHNERB JEAN FR ; GENERALE ALIMENTAIRE 164 AVENUE DE NEUILLY F 92 NE

Inventor(s):(std)**:** SCHNERB J

Inventor(s): J SCHNERB ; JSCHNERB

International class (IPC 8-9): B65D25/20 B65D25/54 B65D43/02 B65D6/00 B65D75/36 (Advanced/Invention); B65D25/00 B65D25/20 B65D43/02 B65D6/00 B65D75/28 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1-7): B65D11/00 B65D11/10 B65D17/00 B65D17/16 B65D25/20 B65D25/54 B65D6/00 B65D75/00 B65D81/00

CPC: B65D11/10 B65D25/20 B65D43/022 B65D43/0222 B65D2101/0015 B65D2543/00194 B65D2543/00296 B65D2543/00518 B65D2543/00527 B65D2543/00537 B65D2543/00546 B65D75/22 B65D75/566 B65D2575/565

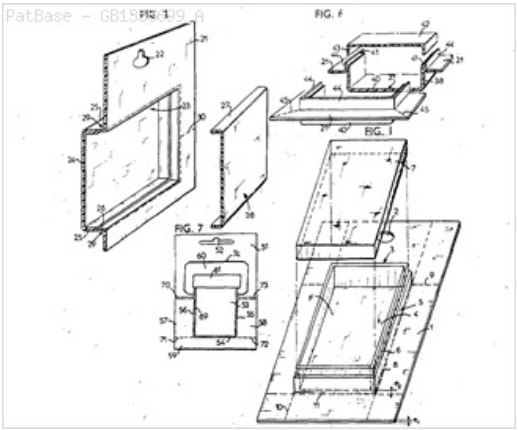
European class: B65D25/20 B65D43/02S5D B65D43/02S5E B65D75/22 B65D75/56C L65D575/56B

Classification Explorer

Forward Citations: US4771888, GB2196320, GB2196320, GB2163130,

Abstract:

Source: GB1355699A 1355699 **Packages** GENERALE ALIMENTAIRE 8 Nov 1971 [13 Nov 1970 26 Jan 1971 5 May 1971 11 Oct 1971] 51768/71 Headings B8C and B8P A **packaging** and display **unit** consists of a support sheet 1 in which a **box** body 3 is integrally moulded with peripheral line of reduced strength 8, 9, 10, 11 to permit removal by tearing, cutting, or slitting, of body 3, a **cover** 7 being provided to engage the recess formed by step 6 in the body 3. **Cover** 7 may be transparent. Body portion 3 may be raised as in Fig. 1, or sunken as in Figs. 2 and 6. In one embodiment, Fig. 7, a **box** or bottle 53 is connected to sheet 51 along lines 55 by frangible **tags**, an aperture 60 being formed to allow a stopper 61 to be fitted. Weakened lines 70, 71, 72, 73 permit removal of the sheet in sections.



360) Family number: 1004932 (US3663239A)

Title:	TOASTER **PACKAGES** HAVING FOUR SPOUTS
Priority:	US19690813911 19690407 US19710139283 19710430

Family:

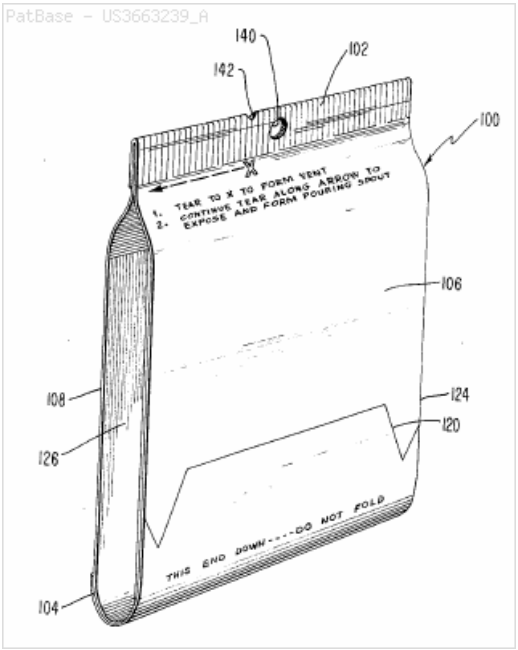
Publication number	Publication date	Application number	Application date
US3663239 A	19720516	US19690813911	19690407
US3834113 A	19740910	US19710139283	19710430

Probable Assignee:	NABISCO INC
Assignee(s):(std):	NABISCO INC
Assignee(s):	NABISCO INC US
Inventor(s):(std):	HOWE J ; MARKUS J ; MARKUS JOSEPH ; ROWE JAMES H
Inventor(s):	MARKUS J US ; JOSEPH MARKUS ; JAMES H ROWE ; HOWE J US
International class (IPC 8-9):	B65D75/58 B65D81/34 (Advanced/Invention); B65D75/52 B65D81/34 (Core/Invention)
International class (IPC 1-7):	B65B43/02 B65D5/74 B65D65/42 B65D81/34 B65D85/36
CPC:	Y10S383/906 B65D81/3492 B65D75/5805 B65D75/5816
European class:	B65D75/58B B65D75/58D B65D81/34T
US class:	206/46 229/17 229/3.5 229/35 383/100 383/103 383/200 383/209 383/9 383/906 426/107 426/113 426/115 426/122 493/200 493/213 53/14 53/410 53/412 53/452 99/171 991/710

Classification Explorer

Cited documents:	US3458111 A, US3446632 A, US3412918 A, US3313471 A, US3132029 A, US2912336 A, US2554050 A, US2369716 A, US2314819 A, US1975253 A, US1747189 A, US1029784 A, CA733751 A,
Forward Citations:	WO9401345, WO9309037, WO9108148, WO03080456, WO0212088, WO0212088, USD652320, USD597853, USD584165, US8641279, US8640431, US8523437, US8490577, US8336495, US8118199, US8021049, US7824720, US7681375, US7320545, US7165887, US7086782, US7065937, US6957915, US6913387, US6910806, US6807795, US6715919, US6679629, US6533711, US6499598, US6416223, US6360513, US6359447, US6352365, US6309104, US6260705, US6193416, US5966898, US5964534, US5942267, US5894707, US5826985, US5806280, US5749657, US5547284, US5525363, US5519982, US5273514, US5241150, US5219229, US5175011, US5078939, US5059035, US4930906, US4841712, US4779736, US4775560, US4681218, US4644732, US4557385, US3984592, US3983256, US3890448, US3873735, US3836064, US2014346076, US2013316887, US2012145583, US2010166924, US2010158416, US2010140127, US2010077699, US2009180717, US2008087268, US2008010950, US2007220838, US2007194042, US2007042088, US2007026111, US2005233034, US2005029704, US2004226265, US2004226264, US2004101605, US2004025711, US2003179957, US2003035598, JP6108963, JP2014230688, FR2658797, FR2576878, EP1501737, EP0665173, EP0338622, EP0192589,

Abstract:
Source: US3663239A **Packages** having pour spouts for storing food and heating the food in a toaster including a top **seal** having the pour spout incorporated therein in order to permit formation of the pour spout after the **packages** are vented by tearing through the top **seal** to enable food to be poured from the **packages**. A method of forming the **packages** including folding a sheet of material upon itself to form a top margin, a bottom margin and a longitudinal seam, **sealing** the longitudinal seam, forming a bottom **seal** with the bottom margin, filling the **package** through the top margin with food, and forming a top **seal** with the pour spout by folding the top margin upon itself twice.



361) Family number: 535957 (US3748819A)

Title: ARRANGEMENT FOR FILLING AND CLOSING **PACKAGES**, COMPRISING AN OUTER **PACKAGE** AND AN INNER **PACKAGE** LOOSELY APPLIED THEREIN

Priority: SE19700015814 19701123

Family:

Publication number	Publication date	Application number	Application date
CH533033 A	19730131	CH19710014247	19710930
DE2155441 A1	19720608	DE19712155441	19711108
DE2155441 B2	19740404	DE19712155441	19711108
DE2155441 C3	19741107	DE19712155441	19711108
GB1355996 A	19740612	GB19710041914	19710908
JP54009559 B4	19790425	JP19710089479	19711111
NL7115296 A	19720525	NL19710015296	19711105
SE354456 B	19730312	SE19700015814	19701123
US3748819 A	19730731	US19710179698	19710913

Probable Assignee: CHRISTENSSONS MASKINER

Assignee(s):(std)**:** CHRISTENSSONS MASKINER

Assignee(s): CHRISTENSSONS MASKINER PATENTER AB ; CHRISTENSSONS MASKINER AND PATENTER AB SW ; CHRISTENSSONS MASKINER AND PATENTER AB STOCKHOLM ; CHRISTENSSON MASKINER AND PATENTER AG ; CHRISTENSSONS MASKIMER AND PATENTER AB SW

Inventor(s):(std)**:** CHRISTENSSON O ; CHRISTENSSON OD WIKAR ; OD WIKAR CHRISTENSSON

Inventor(s): CHRISTENSSON OD WIKAR BROMMA SCHWEDEN ; WIKAR CHRISTENSSON OD ; CHRISTENSSON O SW

International class (IPC 8-9): B65B43/50 B65D5/20 B65D5/24 B65D5/28 (Advanced/Invention)

International class (IPC 1-7): B65B1/20 B65B1/24 B65B1/28 B65B31/02 B65B43/26 B65B43/54 B65B43/60 B65B7/16 B65B7/28 B65D5/28

CPC: B65B43/50 B65D5/2019 B65D5/2038 B65D5/2047 B65D5/241 B65D5/28

European class: B65B43/50 B65D5/20C1 B65D5/20D B65D5/20D2 B65D5/24A B65D5/28

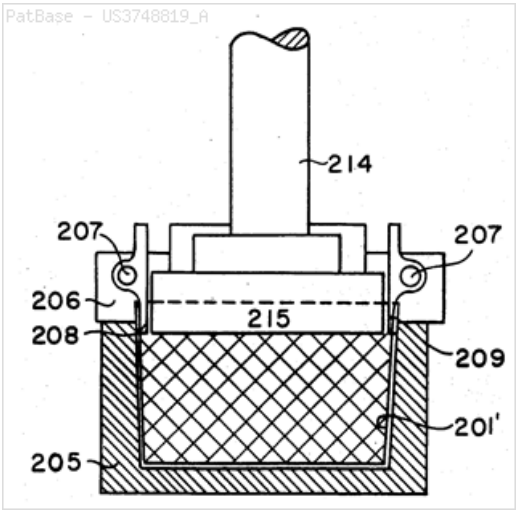
US class: 53/12.4B 53/527

Classification Explorer

Cited documents: US3585781 A, US3468095 A,

Forward Citations: US9688465, US9586709, US8783004, US7485329, US6280787, US5941055, US4483878, US4154045, US4018030, US2014141128, US2011247307, US2007031540, US2003113413, GB2143198, EP0605035,

Abstract:
Source: US3748819A A machine for filling, compressing and closing **packages** of the type comprising an outer **package** of stiff material and an inner **package** of thin weldable material so shaped that the inner **package** at its upper edge in the unfilled state contacts the inner side of the upper edge of the outer **package** without being attached thereto includes an arrangement for inserting each unfilled **package** into a mold, lowering a clamping member formed with inner and outer frame parts down over the **package**-containing mold such that the inner and outer frame parts clamp the upper edges of the inner and outer **packages**, the clamping being retained during subsequent filling of the **package** and compression of the material within the **package**, the compression being effected by a piston or the like. The clamping frame is thereafter withdrawn, followed by further treatment of the **package**, such as evacuation, final closing, etc., after which the **package** is separated from the supporting mold. The clamping frame preferably comprises an outer frame which fits down around the upper edge of the composite **package**, and inner side parts which are pivotably mounted on the outer frame to pass downwardly into the **package**. A pressure frame pivots the side parts about their axes to complete the clamping of the upper edges of the **package** during filling, compression, etc.



362) Family number: 535959 (DE2155459A1)

Priority:	SE19700015813 19701123

Family:

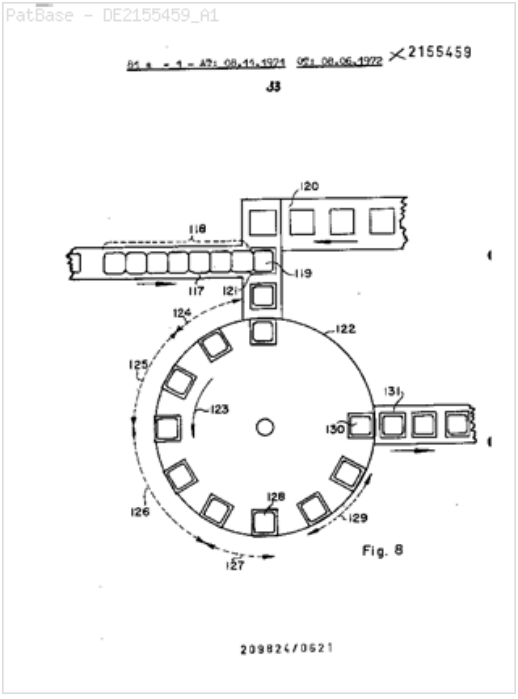
Publication number	Publication date	Application number	Application date
DE2155459 A1	19720608	DE19712155459	19711108
NL7114334 A	19720525	NL19710014334	19711019

International class (IPC 8-9):	B65B43/50 B65B43/52 (Advanced/Invention); B65B43/42 (Core/Invention)
International class (IPC 1-7):	B65B43/50 B65B43/52
CPC:	B65B43/50 B65B43/52
European class:	B65B43/50 B65B43/52

Classification Explorer

Abstract:
Source: DE2155459A1 Paten tan srueche 1 In mehreren Einheiten aufgeteilte Maschine fuer Fuellen, Evakuieren und Verschliessen von Verpackungen fuer pulverfoermige, kompressible Erzeugnis- se, aus einer aeusseren Verpackung aus Karton oder einem aehnlichen steifen Material und einer inneren Verpackung aus einem foliefoermigen, weichen aber gut dichtenden Material bestehend, welche aeussere Verpackung aus einem topffoermigen Teil (Fig 2) besteht, und welche innere Verpackung aus einem durch Falten von einem ebenen Keim (Fig 3) aus Kunststoff- oder Metallfolie oder dergleichen in Uebereinstimmung mit der aeusseren Verpackung geformtes Stueckchen besteht,dadurchgekennzeichnet dass die Maschine eine groessere Anzahl von in Folge nach einander durch die verschiedenen Maschineneinheite frei sich herumbewegenden Forme enthaelt, welche angepasst sind, die eine Maschineneinheit nach der anderen zu folgen, und welche ausserdem angepasst ist, die Verpackung aufzunehmen, welche dabei in die Form in ihrem noch nicht gefuellten und verschlossenen Stande aufgenommen wird, wobei die Herumlaufvorrichtung so ausgefuehrt ist, dass die Verpackung in ihrem noch nicht gefuellten Stande in eine von diesen Formen (119) herabgesenkt wird und sich in dieser Form waehrend einer Anzahl von krbeitsmassnah- men befindet, die Fuellung der Verpackung mit der zu verpackenden !cre (vig 8) umfassend, leiter deren Kompression durch aeusseren, mekanischen mittel (Fig 9) umfassend, weiter deren partiellen Verschluss, deren Evakuieren (Fig 10) und deren schliessljehen Vakuumdichten Verschluss umfassend, wobei die Form an geordnet ist, waehrend sie immerfort in sich die Verpackung traegt, in Folge nach einander von der einen Maschineneinheit zu der anderen uebertragen zu werden, wonach die Verpackung in ihrem vollendeten Stande aus der Form (die Bahn 160) entfernt wird, und die Form in den Ruecklauf (die Bahn 120) eintritt, in welchem sie zu einer frueheren Maschineneinheit zurueckgefuehrt wird um dort eine neue, noch nicht gefuellte Verpackung aufzunehmen 2.

Machine translation: Sponsors tan srueche 1 In several **units**, split machine for filling, evacuating and **sealing** of **packaging** for powder-like, compressible produce, consisting of an outer **packaging** made of cardboard or similar rigid material and an inner **packaging** of a foliefoermigen, soft but well-**sealing** material consisting of what external **packaging** of a cup-shaped part (Fig. 2) is, and what inner **packaging** of a by folding a flat nucleus (Fig 3) of plastic or metal foil or the like in conformity with the outer **packaging** shaped pieces, characterized that the machine has a bigger number of contains in succession after each other through the various machine **units** free to move around coliforms, which are adapted to follow a machine **unit** to the other, and which also is adapted to receive the **package**, which it in the form of their not yet filled and closed registry will be included, with the around-wheel device is so executed that the **package** is in their not filled yet able in one descended from these forms (119) and men krbeitsmassnah in this form during a number of is that to be **packaged** stuffing the **box** with the! cre (vig 8) extensively, ladder whose compression by external, mekanik medium (Fig 9) comprising, on the partial **closure**, the evacuation (Fig 10) and its schliessljehen vacuum tight **seal** is extensive with the form arranged is, while they in themselves continually packing wears, in succession after each other from one machine **unit** to be about to bear the other, that the **packaging** is removed in its consummate professional from the mold (the train 160), and the form in the rewind (the train 120) occurs, in which it is fed back to an earlier machine **unit** to where a new record not yet stuffed **packaging** 2



363) Family number: 1735322 (US3782066A)

Title: METHOD OF MAKING AND FILLING AN ASEPTIC PACKING **CONTAINER**

Priority: DE19712108962 19710225 DE19712120274 19710426 US19720227577 19720218 DE19722200310 19720105 US19730321255 19730105

Family:

Publication number	Publication date	Application number	Application date
AT128072 A	19771015	AT19720001280	19720216
AT344093 B	19780710	AT19720001280	19720216
BE779769 A	19720616	BE19720779769	19720224
CH541468 A	19730915	CH19720001484	19720201
DE2108962 A1	19720831	DE19712108962	19710225
DE2120274 A1	19721109	DE19712120274	19710426
DE2200310 A1	19730712	DE19722200310	19720105
FR2127570 A5	19721013	FR19720003110	19720131
GB1368358 A	19740925	GB19720008599	19720224
IT953458 A	19730810	IT19720021003	19720224
NL7201970 A	19720829	NL19720001970	19720215
US3782066 A	19740101	US19720227577	19720218
US3862684 A	19750128	US19730321255	19730105

Probable Assignee: KARLSRUHE AUGSBURG IWEKA

Assignee(s):(std)**:** IND WERKE KARLSRUKE AUGSBURG A ; KARLSRUHE AUGSBURG IWEKA

Assignee(s): INDUSTRIEWERKE KARLSRUKE AUGSBURG AG DT ; INDUSTRIE WERKE KARLSRUHE AUGSBURG AKTIENGESELLSCHAFT ; INDUSTRIEWERKE KARLSRUHE AUGSBURG AKTIENGESELLSCHAFT ; INDUSTRIEWERKE KARLSRUHE AUGSBURG AG ; INDUSTRIEWERKE KARLSRUKE AUGSBURG DT AG ; INDUSTRIE WERKE KARLSRUHE AUGSBURG A G ; INDUSTRIE WERKE KARLSRUHE AUGSBURG A G POSTFACH 3409 75 KARLSRUHE 1 ALLEMAGNE ; INDUSTRIE WERKE KARLSRUHE AUGSBURG AG ; IND WERKE KARLSRUHE ; IND WERKE KARLSRUHE AUGSBURG AG

Inventor(s):(std)**:** ROLAND SCHMITT ; SCHMITT R ; SCHMITT ROLAND

Inventor(s): SCHMITT R DT

International class (IPC 8-9): A61J1/06 B65B3/00 B65B3/02 B65B9/04 B65D1/09 B65D75/20 B65D75/24 B65D75/42 B65D75/58 (Advanced/Invention);
A61J1/06 B65B3/00 B65B9/00 B65D75/00 B65D75/04 (Core/Invention)

International class (IPC 1-7): A61J1/00 A61J1/06 A61J5/00 B65B3/00 B65B3/02 B65B47/00 B65B61/00 B65B9/04 B65B9/10 B65D1/00 B65D1/02 B65D11/04 B65D17/20 B65D17/50 B65D6/00 B65D75/24 B65D75/40 B65D81/00 B65D83/00 B65D85/00 B65D85/42

CPC: A61J1/067 B65B9/042 B65D75/24 B65D1/095 B65D75/5822 Y10S206/82 B65B3/003 A61M2207/00 B65D75/20 B65D75/42 B65B7/161

European class: A61J1/06D B65B3/00B B65B3/02 B65B9/04B B65D1/09D B65D75/20 B65D75/24 B65D75/42 B65D75/58D1 K61M207/00

US class: 206/277 206/438 206/484 206/820 222/107 53/1.4 53/14 53/412 53/453 53/467

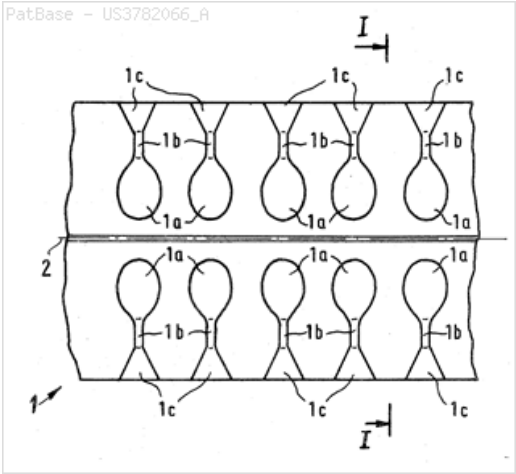
Classification Explorer

Cited documents: US3540179 A, US3469364 A, US3278085 A, US3266625 A, US3162306 A, US3039246 A, US2962192 A, US2691259 A, US2541674 A, US2420983 A, US2333587 A,

Forward Citations: WO9604185, WO9414356, WO9108951, WO8503275, WO07126817, WO07126817, WO0242159, WO0128885, USRE46510, USD740430, USD543866, US9850046, US9694965, US9555909, US9463143, US9173728, US9132243, US9095399, US8945182, US8376183, US8266872, US8141709, US8061563, US7241066, US6645180, US6605064, US6586060, US6558631, US6557731, US6346109, US6174083, US6055794, US5839609, US5735401, US5535885, US5272093, US5223073, US5127211, US5046608, US5018646, US4988016, US4907394, US4871091, US4862676, US4787536, US4786534, US4704844, US4696393, US4642972, US4588090, US4502616, US4491245, US4427111, US4364220, US4301796, US4218155, US4155454, US3993223, US3920122, US2017259984, US2016152359, US2016122103, US2015122840, US2014290184, US2014228785, US2014221917, US2014000223, US2013292414, US2013264238, US2011284582, US2011233232, US2010257681, US2010251798, US2010107560, US2009205993, US2007228073, US2007034647, US2006207912, US2005138902, US2005051456, US2004045265, US2003085147, FR2794433, FR2728456, FR2557540, FR2320727, ES2161164, EP2371341, EP1466838, EP1362788, EP1341695, EP1209080, EP0955244, EP0718191, EP0343266, EP0278575, EP0278575, EP0148080, DE3018691, DE10250452, DE10250452, CN103655183, CN103655183, AU633218, AU2003255202,

Abstract:
Source: US3782066A A method for the production of aseptic packings, particularly a single use packing such as an ampoule, etc., comprises a plurality of oppositely directed substantially identical indentations on a foil on each side of a fold line. Thereafter, the foil material is folded along the fold line to align the indentations so that they form half portions of individual **containers**. The foil sections are welded or otherwise **sealed** together so that they close the **container** around the juncture line. Each **container** indentation includes a neck portion terminating in an outwardly widening funnel **opening** adjacent the edge of the foil material. The individual **containers** are then filled through the funnel and the neck portion is thereafter **sealed** directly below the bottom of the funnel by pressure welding. The area adjacent the closed weld line is provided with tear lines to facilitate easy **opening** and removal of the contents from the **containers**. An aseptic packing comprises a strip of two superposed foil sheets, each having aligned recessed portions forming **container** halves which together form a complete closed **container** which is closed around the periphery by the foil material. The strip includes tear line portions for both separating individual **containers** from the strip and for **opening** the mouth of each **container**.

PatBase - US3782066_A



364) Family number: 539814 (US3757371A)

Title: SURVIVAL OR LIKE PACKS PARTICULARLY SUITABLE FOR AIRMEN

Priority: GB19700060682 19701221

Family:

Publication number	Publication date	Application number	Application date
DE2159720 A1	19720629	DE19712159720	19711202
DE2159720 B2	19750612	DE19712159720	19711202
DE2159720 C3	19760205	DE19712159720	19711202
FR2118981 A1	19720804	FR19710045934	19711221
FR2118981 B1	19740510	FR19710045934	19711221
GB1360212 A	19740717	GB19700060682	19701221
SE381850 B	19751222	SE19710016044	19711215
SE381850 C	19760408	SE19710016044	19711215
US3757371 A	19730911	US19710201838	19711124

Probable Assignee: MARTIN JAMES GB

Assignee(s):(std)**:** MARTIN J ; MARTIN JAMES

Assignee(s): MARTIN JAMES DENHAM MIDDLESEX GROSSBRITANNIEN ; MARTIN J GB ; MARTIN JAMES GB

Inventor(s):(std)**:** MARTIN J ; MARTIN JAMES

Inventor(s): MARTIN JAMES DENHAM MIDDLESEX GROSSBRITANNIEN ; MARTIN J GB

International class (IPC 8-9): B63C9/19 B63C9/23 B64D17/22 B64D17/78 (Advanced/Invention); B63C9/00 B64D17/00 (Core/Invention)

International class (IPC 1-7): B63C9/16 B63C9/22 B63C9/24 B64D25/00 B64D25/16 F17C13/06

CPC: B64D17/30 B64D17/78

European class: B64D17/22 B64D17/30 B64D17/78 L64D700/62D9B3 L64D700/62D9H

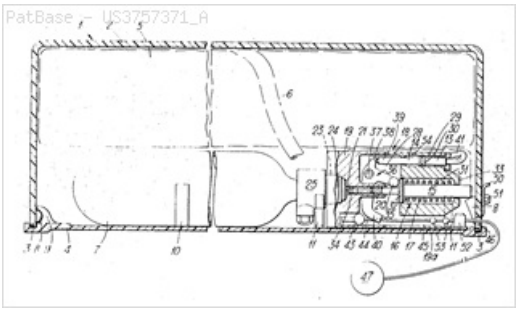
US class: 222/5 244/147 441/94 9/31.6

Classification Explorer

Cited documents: US3449777 A, US3107370 A, US2467037 A, FR2025679 A1,

Forward Citations: WO03022631, WO03022367, US9656758, US9517976, US8920205, US8360276, US7572161, US7475711, US7357689, US6705572, US6705488, US6589087, US6260570, US5509576, US5429539, US5400922, US5072727, US4946067, US4775119, US4632276, US4356936, US4313501, US4267944, US4055277, US4024986, US3910457, US3899105, US2015102171, US2014051309, US2011000550, US2007277903, US2006160444, GB2286452, GB2286452, DE9216834, DE2842597,

Abstract:
Source: US3757371A An **openable** survival pack particularly suitable for an ejection seat and suitable for housing an inflatable article, the pack comprising a hollow body; a **closure** therefor; and means for automatically releasing fastening means on said pack on entry of the pack into water, optional means also being provided when desired for causing automatic inflation of the article housed by the body on release of said fastening means.



365) Family number: 29382057 (US3854714A)

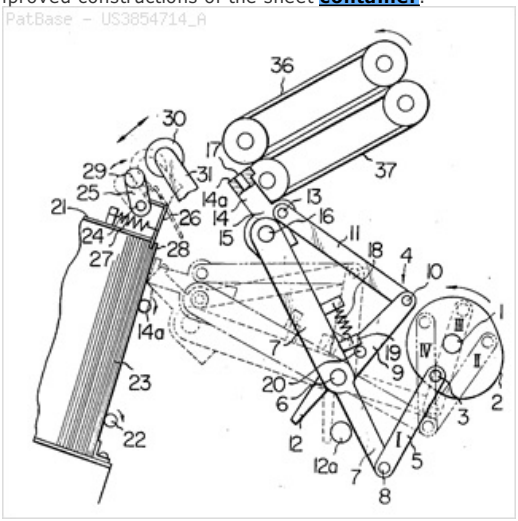
Title:	SHEET **DISPENSING** MACHINE
Priority:	JP19700120343 19701228 JP19700120344 19701228 JP19700132798U 19701228

Family:

Publication number	Publication date	Application number	Application date
DE2164769 A1	19720720	DE19712164769	19711227
FR2121019 A5	19720818	FR19710047105	19711228
GB1365099 A	19740829	GB19710060285	19711229
JP48016667 B4	19730523	JP19700120344	19701228
JP49034416 Y1	19740918	JP19700132798U	19701228
JP50002704 B4	19750128	JP19700120343	19701228
US3854714 A	19741217	US19710213005	19711228

Probable Assignee:	GLORY KOGYO KK
Assignee(s):(std)**:**	GLORY KOGYO KK
Assignee(s):	GLORY KOGYO KK JA
Inventor(s):(std)**:**	ABE M ; HATANAKA Y ; INOUE S ; TERADA H
Inventor(s):	TERADA H JA ; INOUE S JA ; HATANAKA Y JA ; ABE M JA
International class (IPC 8-9):	B65D83/08 B65H1/02 B65H1/04 B65H1/10 B65H1/26 B65H3/08 B65H3/32 B65H3/46 B65H3/50 B65H3/68 B65H7/12 G07D1/00 G07D11/00 G07F11/04 (Advanced/Invention); B65D83/08 B65H1/02 B65H1/04 B65H1/08 B65H1/26 B65H3/08 B65H3/32 B65H3/46 B65H3/66 B65H7/12 G07D1/00 G07D11/00 G07F11/04 (Core/Invention)
International class (IPC 1-7):	B65D83/08 B65H29/00 B65H3/00 B65H3/08 B65H3/46 B65H3/50 B65H5/00 B65H5/08 B65H7/12 G07B5/00 G07D1/00
CPC:	G07D11/0003 G07D11/0012 G07F11/045
European class:	G07D11/00D G07D11/00D2D G07F11/04B
US class:	271/12
Classification Explorer	
Cited documents:	US3385594 A, US2675233 A, US2223391 A, US1736340 A, JP42018109, JP36016077, JP33003914,
Forward Citations:	US8240663, US7677410, US7172116, US2009212486, US2008135570, US2005133592, EP0038175, DE102006031535, CN102324137,

Abstract:
Source: US3854714A In a money **dispensing** machine or the like in which bills or other sheets held in a stack are successively carried by suction to a sheet **dispensing** section, a suction head for carrying the sheets from their **container** to conveyor means leading to the sheet **dispensing** section is linked to a cam so as to flex upon due contact with the foremost one of the sheets within the **container** thereby partly separating the same from the rest of the sheets. Sheet-holding means operated by the same cam includes a member which holds the remaining sheets in position each time the foremost sheet is thus partly separated by the flection of the suction head. Sheet-detaching means also operated by the cam lifts the sheet succeedingly carried to the conveyor means off the suction head. A detector is provided to the conveyor means to ascertain if the sheets are being carried thereto one by one. There are also disclosed herein some improved constructions of the sheet **container**.



366) Family number: 1135980 (US3687593A)

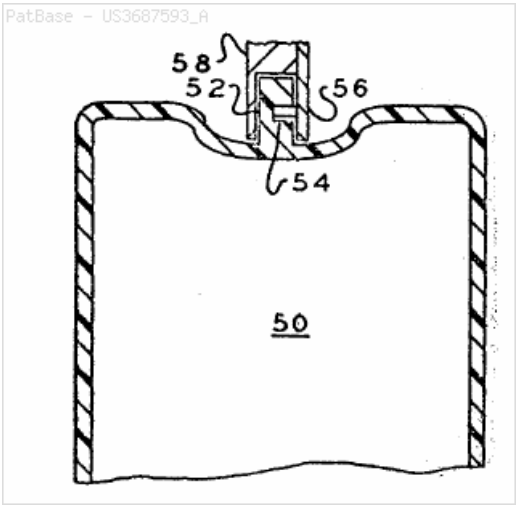
Title:	ALTERNATE PROJECTIONS IN **SEALING** MEMBER
Priority:	US19710103380 19710104 US19720254741 19720518 US19740438427 19740131

Family:

Publication number	Publication date	Application number	Application date
US3687593 A	19720829	US19710103380	19710104
US3821345 A	19740628	US19720254741	19720518
US3880312 A	19750429	US19740438427	19740131

Probable Assignee:	PHILLIPS PETROLEUM CO
Assignee(s):(std):	PHILLIPS PETROLEUM CO
Assignee(s):	PHILLIPS PETROLEUM COMPANY ; PHILIPS PETROLEUM CO ; PHILIPS PETROLEUM CO US
Inventor(s):(std):	GILBERT D ; GILBERT DIXIE E
Inventor(s):	DIXIE E GILBERT ; GILBERT D US
International class (IPC 8-9):	B29C49/14 B29C49/48 (Advanced/Invention); B29C49/08 B29C49/48 (Core/Invention)
International class (IPC 1-7):	B29C17/07 B29D23/03 B65D23/00
CPC:	B29C49/14 B29C49/4817
European class:	B29C49/14 B29C49/48B
US class:	215/100R 215/399 248/682 264/161 264/532 264/535 264/542 264/98 425/387 425/531
Classification Explorer	
Cited documents:	US3592885 A, US3514812 A, US3499071 A, US3215299 A, US3202324 A, US2810160 A,
Forward Citations:	US7464826, US5799809, US5022544, US4272233, US4093169, US4010862, US3924998, US3758254, US2016136867, US2015141748, US2006070974, EP0756928, EP0756928, EP0204200,

Abstract:
Source: US3687593A Parison **sealing** and severing members have small projections which aid in gripping a flattened end of the parison.



367) Family number: 551266 (DE2107795A1)

© PatBase

Priority:	DE19712107795 19710218

Family:

Publication number	Publication date	Application number	Application date
DE2107795 A1	19720831	DE19712107795	19710218

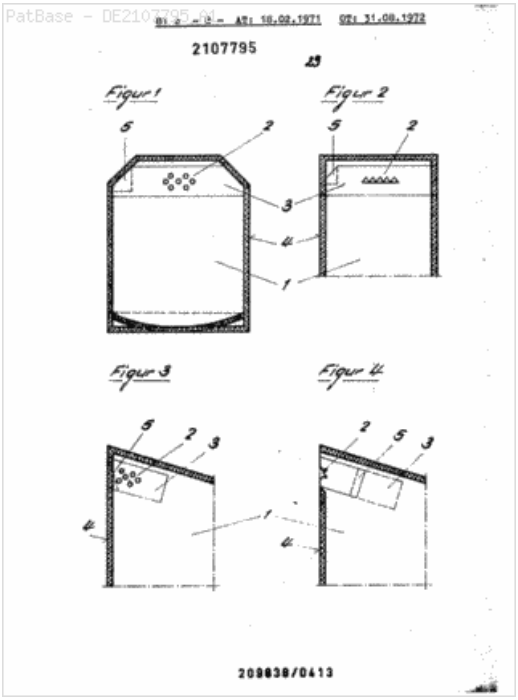
International class (IPC 8-9):	B65D75/00 B65D75/58 (Advanced/Invention); B65D75/00 B65D75/52 (Core/Invention)
International class (IPC 1-7):	B31B23/74 B65D33/18
CPC:	B65D75/008 B65D75/5894
European class:	B65D75/00E B65D75/58J

Classification Explorer

Forward Citations: US6106153, US4588078, US4476976, FR2962113, EP0882657, EP0178352, DE102009015795,

Abstract:
Source: DE2107795A1 (Claim 1) 1. Verpackungsbeutel, insbesondere fuer fluessige, streufaehige und pastoese Gueter, beispielsweise Trink-, Streu- oder Spritz beutel, bestehend aus einer im wesentlichen schlauch- oder beutelfoermigen Wand aus Kunststoff mit einer am einen Ende angebrachten Entnahmeoeffnung mit einem Verschluss, wobei der Beutel an dem der Entnahmeoeffnung entgegengesetzten En de mit einem sich bei gefuelltem Beutel seitlich ausweiten den, durch eine mit den Seitenwaenden verschweisste Boden folie gebildeten Stehboden ausgebildet ist und die Beutel wand an den Seitenkanten und am oberen Beutelende, insbe sondere auch im Bereich der Entnahmeoeffnung zu flachen Verbundkanten zusammengehalten ist, nach Patent... (Patentanmeldung P 15 36 263.7), dadurch gekennzeichnet, dass die Entnahmeoeffnung (2) mit den Inhalt des Beutels (1) in beliebiger Form freigebendem oeffnungsquerschnitt und mit einem im Bereich der Entnahmeoeffnung (2) angebrach e abziehbareD ten, zum irreigenen aer ntnanmeoriung kJ Folienstreifen (3) ausgebildet ist.

Machine translation: (Claim 1) 1 **Packaging** **bags**, especially for liquid, streufaehige and pastes, for example, drinking water, scattered or sprayed **bags**, consisting of a substantially tubular or beutelfoermigen wall made of plastic with a at one end attached Entnahmeoeffnung with a **closure**, the **bag** where the Entnahmeoeffnung opposite expand En de with a laterally when they were full **bag** the one formed by a sheet with the side walls welded floor educated stand-up and the **bag** wall on the side edges and upper **bag** end, in particular but also in the field of Entnahmeoeffnung held together to form flat composite edges, according to patent... (Patent Application P 15 36 263.7), characterized in that the Entnahmeoeffnung (2) with the contents of the **bag** (1) in any form generous oeffnungsquerschnitt and one from the Entnahmeoeffnung (2) was interrupted e abziehbareD th, for irreigenen aer ntnanmeoriung kJ foil strip (3) is formed.



368) Family number: 1512541 (US3815318A)

Title: **PACKAGING** METHOD AND APPARATUS

Priority: US19710139453 19710503 US19730336560 19730228 US19730422281 19731206 US19740467791 19740507 US19730401600 19730928 US19750570784 19750423

Family:

Publication number	Publication date	Application number	Application date
BE782910 A	19720901	BE19720117005	19720502
BE811637 A4	19740617	BE19740141445	19740227
BE811637 R	19740617	BE19740141445	19740227
CA1016510 A1	19770830	CA19740193771	19740228
CA1032514 A1	19780606	CA19750226413	19750506
CA997315 A1	19760921	CA19720140978	19720501
DE2221310 A1	19721123	DE19722221310	19720429
DE2221310 C2	19841122	DE19722221310	19720429
DE2409290 A1	19740912	DE19742409290	19740227
FR2135571 A1	19721222	FR19720015490	19720502
FR2135571 B1	19730713	FR19720015490	19720502
FR2219059 A2	19740920	FR19740006704	19740227
FR2219059 B2	19780811	FR19740006704	19740227
GB1364356 A	19740821	GB19720020402	19720502
GB1467266 A	19770316	GB19740008466	19740225
IT957688 A	19731020	IT19720049990	19720502
LU69491 A	19740605	LU19740069491	19740227
NL172136 B	19830216	NL19720005969	19720503
NL172136 C	19830718	NL19720005969	19720503
NL7205969 A	19721107	NL19720005969	19720503
SE406575 B	19790219	SE19720005615	19720427
SE406575 C	19790531	SE19720005615	19720427
SE406576 B	19790219	SE19750008964	19750808
SE406576 C	19790531	SE19750008964	19750808
SE420395 B	19811005	SE19740002549	19740226
SE420395 C	19820121	SE19740002549	19740226
SE7508964 A	19750808	SE19750008964D	19750808
US3815318 A	19740611	US19710139453	19710503
US3882656 A	19750513	US19730422281	19731206
US3938299 A	19760217	US19740467791	19740507
US3948015 A	19760406	US19730401600	19730928
US3965653 A	19760629	US19730336560	19730228
US4014154 A	19770329	US19750570784	19750423

Probable Assignee: AUTOMATED PACKAGING SYST INC

Assignee(s):(std)**:** AUTOMATED PACKAGING SYST INC ; LERNER BERNARD ; AUTOMATED PACKACING SYSTEMS IN

Assignee(s): AUTOMATED PACKACING SYSTEMS INC ; AUTOMATED PACKAGING SYST ; AUTOMATED PACKAGING SYSTEMS INC US ; AUTOMATED PACKAGING SYSTEMS INC TWINSBURG OHIO US ; AUTOMATED PACKAGING SYSTEMS INC TWINSBURG OHIO V ; AUTOMATED PACKAGING SYSTEMS INC TWINSBURG OHIO V ST A ; AUTOMATED PACKAGING SYST INC US ; AUTOMATED PACKAGING SYSTEMS ; AUTOMATED PACKAGING SYSTEMS INC ; AUTOMATED PACKAGING SYSTEMS INC 8400 DARROW ROAD TWINSBURG ETAT D OHIO E U A ; AUTOMATED PACKAGING SYSTEMS INC TE BEDFORD HEIGHTS OHIO VER ST V AM

Inventor(s):(std)**:** LERNER B ; LERNER BERNARD

Inventor(s): LERNER BERNARD HUDSON OHIO US ; LERNER B US ; B LERNER

International class (IPC 8-9): B65B11/08 B65B31/00 B65B31/04 B65B37/02 B65B39/00 B65B39/12 B65B41/12 B65B41/16 B65B43/12 B65B43/36 B65B51/00 B65B51/14 B65B51/30 B65B57/10 B65B61/12 B65B9/04 (Advanced/Invention); B65B11/06 B65B31/00 B65B31/04 B65B37/00 B65B39/00 B65B41/00 B65B43/00 B65B43/26 B65B51/00 B65B51/14 B65B51/26 B65B57/00 B65B61/04 B65B9/00 (Core/Invention)

International class (IPC 1-7): B65B1/02 B65B1/06 B65B31/00 B65B31/04 B65B37/02 B65B39/00 B65B39/12 B65B41/12 B65B43/12 B65B43/16 B65B43/32 B65B43/36 B65B5/00 B65B51/00 B65B51/14 B65B51/30 B65B57/10 B65B61/12 B65B7/02 B65B7/06 B65B9/00 B65B9/04 B65B9/10 B65B9/12 B65H17/00

CPC: B65B31/00 B65B41/16 Y10T225/393 B65B31/044 B65B39/12 B65B43/123 B65B57/10 B65B61/12 B65B51/303 B65B43/36 B65B51/146 Y10T225/12

European class: B65B31/00 B65B31/04D B65B39/12 B65B41/16 B65B43/12B B65B43/36 B65B51/14D B65B51/30B B65B57/10 B65B61/12

US class: 225/106 225/2 53/187 53/2.9 53/22B 53/29 53/374.8 53/374.9 53/385.1 53/434 53/459 53/468 53/469 53/477 53/479 53/512 53/570

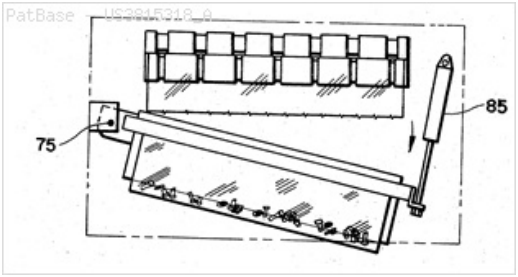
Classification Explorer

Cited documents: US3815318 A, US3699746 A, US3597587 A, US3564810 A, US3551260 A, US3518809 A, US3508379 A, US3508378 A, US3492775 A, US3481102 A, US3477196 A, US3473288 A, US3471990 A, US3448555 A, US3420034 A, US3367087 A, US3287199 A, US3273307 A, US3254468 A, US3234069 A, US3209513 A, US3195290 A, US3075325 A, US3070931 A, US3050916 A, US3045403 A, US3010265 A, US2928216 A, US2919990 A, US2852898 A, US2837883 A, US2633684 A, US2612738 A, GB1281964 A, DE1511728 A1, DE1208871 B,

Forward Citations: WO9006058, WO9004542, WO8604559, WO8604038, WO06021839, USRE32963, USD646972, USD630945, USD603705, US9844911, US9808989, US9623622, US9617021, US9598216, US9550339, US9283729, US9266300, US9205622, US8425994, US8357439, US8354150, US8141329, US8038348, US7975457, US7958697, US7897220, US7897219, US7767288, US7757459, US7718028, US7694495, US7637081, US7571584, US7550191, US7513090, US7448185, US7383676, US7328540, US7320204, US6971221, US6962557, US6895732, US6880310, US6857251, US6742321, US6739370, US6735928, US6655157, US6571850, US6550226, US5957824, US5956929, US5772565, US5709069, US5704197, US5673541, US5664399, US5640834, US5626004, US5599234, US5586708, US5570568, US5568718, US5546732, US5513479, US5499485, US5485714, US5426918, US5394676, US5371521, US5341625, US5301889, US5289671, US5265402, US5115626, US5088231, US5077958, US5070674, US4981374, US4928455, US4901506, US4899520, US4896475, US4856259, US4833867, US4779400, US4756140, US4694638, US4676051, US4674268, US4651506, US4630429, US4512138, US4463627, US4435944,

US4430844, US4387550, US4354335, US4346546, US4324088, US4202153, US4094128, US4014154, US3956866, US3948015, US2014196405, US2011233101, US2011165352, US2011151159, US2010221466, US2010192526, US2010083616, US2009223173, US2009186175, US2009158691, US2009031675, US2009000249, US2008014389, US2007240386, US2007054075, US2007054074, US2006274979, US2006266461, US2006262997, US2006169406, US2006110553, US2006086064, US2006042191, US2005060960, US2004254053, US2004221551, US2004045261, US2003226334, US2003131946, US2003071413, KR101198737, FR2597076, FR2314103, EP1781541, EP1728721, EP1728721, EP1372836, EP1112936, EP0372688, EP0288147, EP0269145, EP0159792, EP0043723, DE10151576, DE10151576, CN102975882, CN102826257,

Abstract:
Source: US3815318A A **packaging** machine and method for automatic or semi-automatic operation with a **bag** **sealing** station provided laterally rearwardly of a **bag** loading station. A web of interconnected heat-**sealable** **bags** are successively fed to the **bag** loading station. The loaded **bag** is moved rearwardly to the **sealing** station and is there clamped against a heater bar by a movable **sealing** bar.



369) Family number: 1020570 (US3688625A)

Title:	CARDBOARD **BOX** AND METHOD OF MAKING SAME
Priority:	US19700050004 19700528

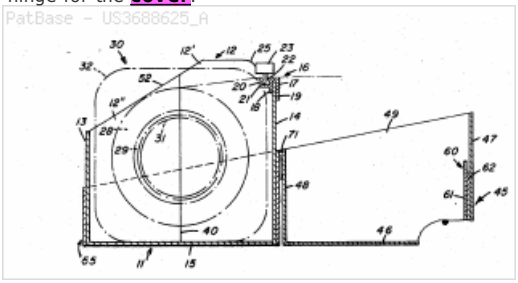
Family:

Publication number	Publication date	Application number	Application date
US3688625 A	19720905	US19700050004	19700528

Probable Assignee:	EASTMAN KODAK CO
Assignee(s):(std):	EASTMAN KODAK CO
Inventor(s):(std):	DUNNING WALTER B ; MCDONALD WILLIAM G ; THOMAS RAYMOND J
Inventor(s):	WALTER B DUNNING ; WILLIAM G MCDONALD ; RAYMOND J THOMAS
International class (IPC 8-9):	B65D81/30 B65D85/672 G03B27/58 G03C3/00 (Advanced/Invention); B65D81/30 B65D85/67 G03B27/58 G03C3/00 (Core/Invention)
International class (IPC 1-7):	B26D5/10 B65D85/67
CPC:	G03C3/00 B65D81/30 B65D85/672 G03B27/588 Y10T83/8822 Y10T83/896
European class:	B65D81/30 B65D85/672 G03B27/58W1 G03C3/00
US class:	83/614 83/649
Classification Explorer	
Cited documents:	US3142217 A, US2823969 A, US2645543 A,
Forward Citations:	US7603937, US7406904, US7000520, US5772094, US5758559, US5440961, US5292046, US5036740, US5025692, US4960022, US4957023, US4787284, US4196647, US2007044617, US2007000935, US2006021485, US2005139626, US2005035133, US2005034585, US2005034584, US2005005755, US2004237746, US2004007606, FR2939116, EP0209177,

Abstract:

Source: US3688625A A **dispensing** **box** for a roll of light-sensitive material wound on a core comprises an inner **box** having an **open** top in which the roll of material is rotatably supported so that it can be **dispensed** in incremental lengths by being pulled across a guide and cutter assembly mounted on the rear edge of the **box**. The **open** top of the inner **box** is **covered** by an outer **box** having an **open** end slid down over its **open** top and having a hinged **cover**, which when **open**, provides easy access to the **open** top of the inner **box**, and which when closed, cooperates with the walls of the inner **box** to provide a lighttight **closure** therefor. A novel method of making this **box**, or any **box** having a hinged **cover**, is to form up two **open**-ended boxes of complimentary shape from flat blanks of boxboard, then telescoped the **open** end of one **box** onto the **open** end of the other and fasten them together near the closed end of the inner **box**, score one wall of the outer **box** to provide a hinge line thereacross, then cut through the other walls of the outer **box** to form a continuous cut joining the two ends of said hinge line. Preferably, the scored hinge line will be made in the flat blank for the outer **box** before it is formed up and will have cemented in **covering** relation therewith a strip of suitable flexible material to act as a hinge for the **cover**.



370) Family number: 40965400 (US3833166A)

Title: VALVE **BAG**

Priority: CA19710108630 19710324 CA19710126718 19711102 PH19730014324 19730208 KR19730000248 19730210

Family:

Publication number	Publication date	Application number	Application date
AR192352 A1	19730214	AR19720241130	19720324
AT325500 B	19751027	AT19720002588	19720324
AU197239144 A1	19730823	AU19720039144	19720218
AU197247041 A1	19740411	AU19720047041	19720925
AU460890 B2	19750508	AU19720047041	19720925
BE780954 A	19720920	BE19720780954	19720320
BR7201735 A0	19730517	BR19720001735	19720324
CA942253 A1	19740219	CA19710126718	19711102
CA984346 A1	19760224	CA19710108630	19710324
DE2213908 A1	19721005	DE19722213908	19720322
DE2213908 C2	19840405	DE19722213908	19720322
DK132826 B	19760216	DK19720001348	19720322
DK132826 C	19760719	DK19720001348	19720322
ES184379 U	19730901	ES19720184379U	19720324
ES184379 Y	19740601	ES19720184379U	19720324
FI53105 B	19771031	FI19720000716	19720316
FI53105 C	19780210	FI19720000716	19720316
FR2130487 A1	19721103	FR19720009803	19720321
FR2130487 B1	19800321	FR19720009803	19720321
GB1367001 A	19740918	GB19720009540	19720301
IE36202 B	19760915	IE19720000277	19720306
IE36202 L	19720924	IE19720000277	19720306
IT959562 A	19731110	IT19720021750	19720311
JP53002104 B4	19780125	JP19720029054	19720324
KR790001730 B1	19791214	KR19730000248	19730210
NL168465 B	19811116	NL19720003810	19720322
NL168465 C	19820416	NL19720003810	19720322
NL7203810 A	19720926	NL19720003810	19720322
PH12519 A	19790425	PH19730014324	19730208
SE418387 B	19810525	SE19720003785	19720323
SE418387 C	19810903	SE19720003785	19720323
US3833166 A	19740903	US19730326546	19730124
ZA7201847 A	19721227	ZA19720001847	19720317

Probable Assignee: C I L INC

Assignee(s):(std)**:** CANADIAN IND

Assignee(s): CANADIAN IND LTD ; CANADIAN IND LTD 630 DORCHESTER BOULEVARD WEST MONTREAL 101 QUEBEC CANADA ; CANADIAN INDUSTRIES LIMITED ; CANADIAN INDUSTRIES LTD ; CANADIAN INDUSTRIES LTD 630 DORCHESTER BOULEVARD W ; CANADIAN INDUSTRIES LTD MONTREAL QUEBEC CA ; CANADIAN INDUSTRIES L D ; CANADIAN INDUSTRIES LIMITED TE MONTREAL CANADA ; CANADIAN IND LTD CA ; CANADIAN INDUSTRIES LTD 630 DORCHESTER BOULEVARD WEST MONTREAL 101 QUEBEC CANADA ; MURRAY CHARLES R ; CIL INC ; NATIONAL TRUST CO ; NATIONAL TRUST CO A TRUST CO OF ONTARIO ; NATIONAL TRUST CO TRUSTEES AS ; AT PLASTICS INC ; C I L INC

Inventor(s):(std)**:** MURAY C ; MURRAY C ; MURRAY C R ; MURRAY CHARLES R ; MURRAY CHARLES ROBERTSON

Inventor(s): MURRAY CHARLES ROBERTSON TORONTO ONTARIO CA ; MURRAY C CA ; C R MURRAY ; CHARLES ROBERTSON MURRAY ; CR MURRAY

International class (IPC 8-9): B65D30/24 B65D31/04 B65D65/02 (Advanced/Invention);
B65D30/24 B65D65/02 (Core/Invention);
B65D (Subclass/Invention)

International class (IPC 1-7): B65D29/00 B65D30/08 B65D30/10 B65D30/24 B65D30/26 B65D31/00 B65D31/04 B65D31/14 B65D65/02

CPC: Y10S383/903 B65D31/14

European class: B65D31/14

US class: 229/6.2.5 383/107 383/109 383/44 383/903

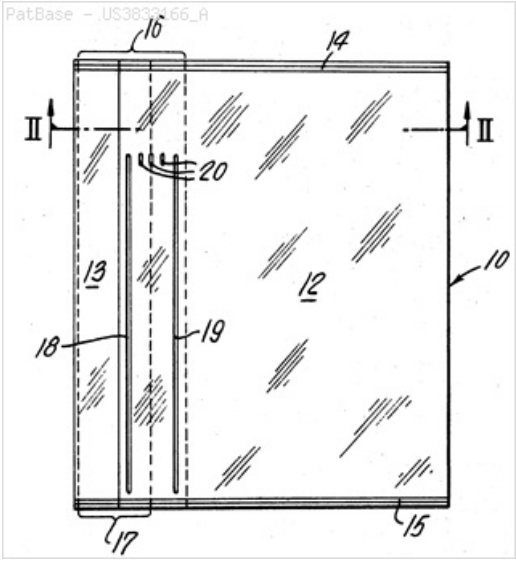
Classification Explorer

Cited documents: US3746246 A, US3595467 A, US3394871 A, US3221789 A, US2800269 A, GB956599 A, DE1927569 A1, DE1486733 A1,

Forward Citations: US8827556, US8231273, US8176604, US8066433, US7967509, US7946766, US7887238, US7886412, US7874731, US7857515, US7784160, US7625459, US7534039, US7517484, US7220053, US7138025, US7087130, US7022058, US6149304, US4681781, US4672684, US4576844, US4566131, US4560598, US4524460, US4470152, US4449243, US4093114, US4073429, US3937395, US2009226573, EP0184362, EP0146270, DE3323587, DE3312925, DE2820955,

Abstract:
Source: US3833166A A valved plastics **bag** which has its valve adjacent and parallel to the top of the **bag** and is constructed of overlapping multi-ply panels in the front wall of the **bag**, the valve being formed between the panels, and one ply of the inner panel forming a sift-proof flap for the valve.

PatBase - US3831466_A



371) Family number: 1137216 (US3851803A)

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Title: SURE SPRAY FOR AEROSOL CAPS AND **DISPENSERS**

Priority: DE19712113781 19710322 DE19712123796 19710513 US19720236700 19720321

Family:

Publication number	Publication date	Application number	Application date
CH537320 A	19730531	CH19720002211	19720216
DE2113781 A1	19720928	DE19712113781	19710322
DE2123796 A1	19721116	DE19712123796	19710513
FR2130575 A1	19721103	FR19720010090	19720322
FR2130575 B1	19750425	FR19720010090	19720322
FR2130575 B3	19750425	FR19720010090	19720322
FR2137877 A6	19721229	FR19720017149	19720512
GB1366195 A	19740911	GB19720011091	19720309
GB1366727 A	19740911	GB19720022188	19720511
NL7203817 A	19720926	NL19720003817	19720322
NL7206315 A	19721115	NL19720006315	19720510
US3851803 A	19741203	US19720236700	19720321
US3881638 A	19750506	US19720253161	19720515

Probable Assignee: PERFECT VENTIL GMBH

Assignee(s):(std)**:** GROTHOFF H ; GROTHOFF HANS ; PERFECT VENTIL GMBH

Assignee(s): GROTHOFF H DT

Inventor(s):(std)**:** GROTHOFF HANS ; HANS GROTHOFF ; GROTHOFF H

Inventor(s): GROTHOFF H DT

International class (IPC 8-9): B65D83/14 (Advanced/Invention); B65D83/14 (Core/Invention)

International class (IPC 1-7): B65D41/00 B65D55/00 B65D55/02 B65D55/06 B65D83/00 B65D83/14 B67B5/00 B67D5/06

CPC: Y10S220/915 B65D83/40

European class: B65D83/40

US class: 220/266 220/915 222/153 222/153.06 222/182 222/402.12

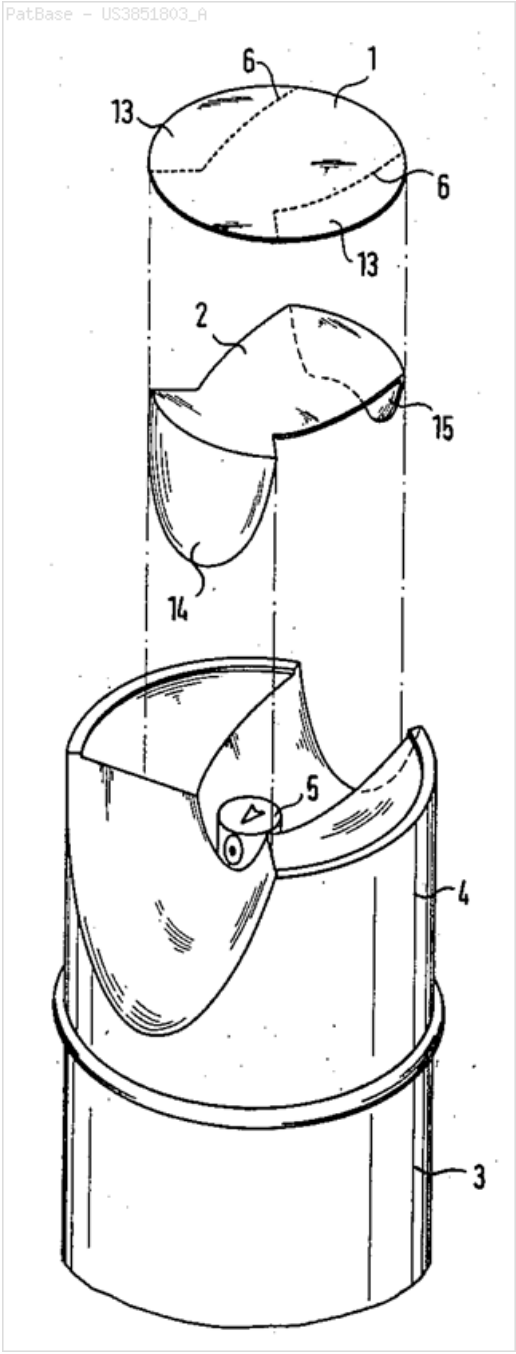
Classification Explorer

Cited documents: US3628699 A, US3596792 A, US3589570 A, US3512682 A, US3469746 A, US3438537 A, US3263868 A, US3245588 A, US3006510 A,

Forward Citations: WO9810997, WO9521096, WO06043001, US6405904, US5890631, US5829610, US5735464, US5462183, US5234132, US5105989, US5012940, US4424919, US4353483, US4028043, US2016311605, US2012006859, US2006273111, US2006273110, FR2876676, EP0739294, EP0460289, EP0460289, DE3722330,

Abstract:
Source: US3851803A A tamperproof securing device for spray tops of aerosol cans comprising a **cover** member and a nozzle shield means both of which are specifically configured to be mounted in or adjacent to a groove-like recess which extends along the diameter of the spray cap. A spray button extends through an aperture in the cap and is at least partially surrounded or encased by the shield means due to depending flanges formed thereon. The shield means includes the dependent flanges which are more specifically configured to engage the peripheral edge of the groove while the **cover** is attached in overlying relation to both the upper surface of the shield means. and the upper surface of the spray cap. Attachment of the **cover** to the cap may be adhesive, heat fusion or any applicable means and accordingly the shield means will be retained on the cap.

PatBase - US3851803_A



372) Family number: 565074 (US3779157A)

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Title: RECEPTACLE FOR WASTE MATERIAL

Priority: US19710138482 19710429 US19730388994 19730816

Family:

Publication number	Publication date	Application number	Application date
AU197132590 A1	19730222	AU19710032590	19710820
DE2157592 A1	19721109	DE19712157592	19711120
DE2157592 B2	19731025	DE19712157592	19711120
DE2157592 C3	19740530	DE19712157592	19711120
DE2166147 A1	19730322	DE19712166147	19711120
FR2135916 A5	19721222	FR19710042743	19711129
GB1370336 A	19741016	GB19710047753	19711014
NL7111809 A	19721031	NL19710011809	19710827
US3779157 A	19731218	US19710138482	19710429
US3938731 A	19760217	US19730388994	19730816

Probable Assignee: ROSS JR T S

Assignee(s):(std)**:** ROSS JR T S ; ROSS JR THORVALD S ; ROSS JUN ; ENTIN L ; ROSS T ; ROSS T S ; ROSS THORVALD

Assignee(s): ROSS T US ; ENTIN L US ; ROSS JUN THORVALD S MANCHESTER MASS V ST A

Inventor(s):(std)**:** ROSS JR THORVALD S ; ROSS THORVALD S JR ; ROSS T ; ROSS JUN THORVALD S ; ENTIN LEONARD P ; ENTIN L

Inventor(s): ROSS T US ; ENTIN L US ; ROSS JUN ; LEONARD P ENTIN ; ENTIN LEONARD P WAYLAND ; ROSS JUN THORVALD S MANCHESTER ; THORVALD S ROSS JR

International class (IPC 8-9): B30B9/30 B65F1/06 B65F1/14 (Advanced/Invention); B30B9/00 B65F1/04 B65F1/14 (Core/Invention)

International class (IPC 1-7): B30B5/00 B30B9/30 B65B1/24 B65B13/20 B65D25/30 B65D33/08 B65D5/46 B65F1/00 B65F1/04 B65F1/06 B65F1/14 B65F1/16

CPC: Y10S100/902 Y10S220/30 B30B9/3053 B65F1/06 B65F1/1405 B65F2220/128 B65F2250/108

European class: B30B9/30E2 B65F1/06 B65F1/14B L65F220/128 L65F250/108

US class: 100/24. 100/240 100/295 100/902 141/73 220/DIG.30 229/117.16 229/125.11 229/125.39 229/54R 241/99 383/10 383/42 383/7 383/98 53/527

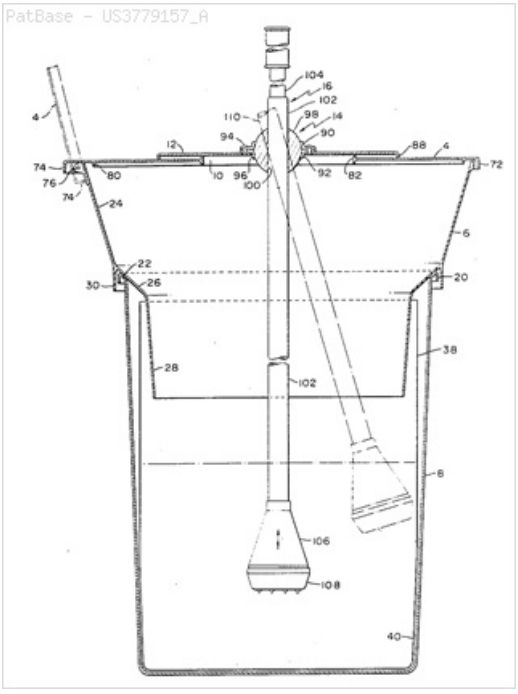
Classification Explorer

Cited documents: US860081 A, US3452415 A, US3226015 A, US3204866 A, US3191798 A, US2576154 A, US2406791 A, US2248108 A, US2178730 A, US2037770 A, US1967842 A, US1726740 A, US1631521 A,

Forward Citations: WO8201508, USRE33527, USD639004, USD639003, USD639002, US9903599, US9896266, US9714138, US9701470, US9550623, US9517884, US9463924, US9352870, US9102432, US9056715, US8960528, US8844435, US8840072, US8833592, US8757563, US8739501, US8714080, US8690017, US8668387, US8647587, US8635838, US8567157, US8215089, US8156863, US8127519, US8001887, US7819277, US7767049, US7380703, US7146785, US7114314, US6903142, US6851251, US5862748, US5857408, US5820016, US5205473, US5090309, US5080011, US4981254, US4690282, US4680808, US4579287, US4530459, US4497433, US4450581, US4331074, US4158995, US4050373, US2015239662, US2013087055, US2012257843, US2012230611, US2011220654, US2011104022, US2011100996, US2011100995, US2011099958, US2011099957, US2011099956, US2011099950, US2011099945, US2011099944, US2009277935, US2007210143, US2005258325, US2005258179, US2005082854, US2004083681, US2004020175, GB2339676, GB2339676, FR2851554, FR2582288, EP1762374, EP1452461, EP1125867, EP0203018, EP0042580, EP0006242, DE202006008528, AU2014227511,

Abstract:

Source: US3779157A A receptacle for receiving, compacting, storing, segregating, and eventual disposal of the compacted trash. It comprises an outer holder, and inner removable and disposable **container**, an overlying combined funnel and **cover**, the funnel **opening** into the top of the disposable **container**, and the **cover** being pivoted to the funnel so as to be swung outwardly therefrom, and being provided with a hole through which a manually actuated compactor or ram may be inserted for crushing the trash.



373) Family number: 3828209 (US3701872A)

Title: HEATING AND LOADING IMPLEMENT FOR MICROWAVE ENERGY

Priority:
US19650470809 19650709 US19650483144 19650827 US19720281182 19720816
US19720293006 19720928 US19680704389 19680209 US19710193940 19711029
US19720381182 19720816 US19760713235 19760806 US19730400416 19730924
US19740529052 19741203 US19750572385 19750428 US19750572385 19750428
US19730391146 19730823 US19730325330 19730122 US19780927397 19780724
US19790004324 19790117 US19800129360 19800311 US19800173006 19800728

Family:

Publication number	Publication date	Application number	Application date
US3701872 A	19721031	US19680704389	19680209
US3731037 A	19730501	US19710193940	19711029
US3777099 A	19731204	US19720293006	19720928
US3854023 A	19741210	US19730391146	19730823
US3881027 A	19750429	US19730325330	19730122
US3985990 A	19761012	US19740529052	19741203
US3985991 A	19761012	US19730400416	19730924
US4103431 A	19780801	US19760713235	19760810
US4390554 A	19830628	US19800129360	19800311
US4390555 A	19830628	US19800173006	19800728

Probable Assignee: LEVINSON M

Assignee(s):(std)**:** LEVINSON M ; LEVINSON MELVIN L

Assignee(s): MELVIN L LEVINSON ; LEVINSON M US

Inventor(s):(std)**:** LEVINSON MELVIN L ; LEVINSON M

Inventor(s): MELVIN L LEVINSON ; LEVINSON M US

International class (IPC 8-9): A23L1/01 A23L3/365 A23L5/10 A47J36/02 F26B3/347 H05B6/64 H05B6/74 H05B6/80 (Advanced/Invention);
A23L1/01 A23L3/365 F26B3/32 H05B6/64 (Core/Invention)

International class (IPC 1-7): A23L1/00 A23L1/01 B65B29/00 B65B29/08 F26B3/28 H05B6/64 H05B9/06

CPC: H05B6/6402 H05B6/74 A47J36/027 H05B6/6494 A23L5/15 F26B3/347 A23L3/365

European class: A23L1/01F A23L3/365 A47J36/02M F26B3/347 H05B6/64A H05B6/64T4C H05B6/74

US class: 206/204 206/205 219/10.55E 219/10.55M 219/703 219/712 219/725 219/729 219/730 219/733 219/752 219/756 219/759 219/763 229/87.08 229/87F 34/259 34/4 426/107 426/113 426/124 426/232 426/234 426/241 426/243 426/302 426/393 426/412 426/523 99/425 99/426

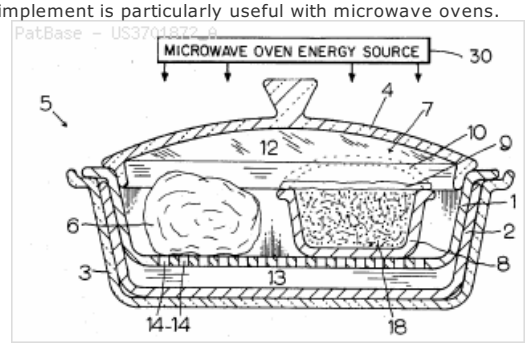
Classification Explorer

Cited documents: US819650 A, US4154861 A, US4132811 A, US4054672 A, US4027132 A, US4015085 A, US4013798 A, US3985991 A, US3985990 A, US3972277 A, US3928045 A, US3906115 A, US3889009 A, US3835280 A, US3716687 A, US3597228 A, US3556817 A, US3539751 A, US3469053 A, US3429359 A, US3420923 A, US3415662 A, US3411433 A, US3410697 A, US3410116 A, US3391846 A, US3322319 A, US3271169 A, US3256101 A, US3230864 A, US3219460 A, US3209978 A, US3188215 A, US3182164 A, US3179780 A, US3171009 A, US2879367 A, US2830162 A, US2820127 A, US2714070 A, US2674536 A, US2648047 A, US2633284 A, US2622187 A, US2600566 A, US2599033 A, US2582174 A, US2495435 A, US2486964 A, US2480679 A, US1436754 A, DE1049019 B, CA479968 A,

Forward Citations: WO9417646, WO9213432, WO9104787, WO9003717, WO9003716, WO9003715, WO9003714, WO8902210, WO8607389, WO09042580, WO08128023, WO07095234, WO07095234, WO03063663, WO0187737, WO0149077, WO0052405, USRE38924, USD806575, USD717162, USD680426, USD653495, USD639656, USD639186, USD638701, USD636218, USD635817, USD635816, USD610903, USD594328, USD510024, US9815607, US9737085, US9676539, US9567148, US9505542, US9352877, US9292889, US9242780, US9211030, US9193515, US9162809, US9132951, US9090751, US9073679, US9035225, US9027825, US8980984, US8967416, US8887943, US8887918, US8866056, US8850964, US8772685, US8756825, US8748786, US8613249, US8525087, US8497455, US8445043, US8318227, US8302528, US8226999, US8080770, US8026464, US7897189, US7812292, US7750274, US7582852, US7564010, US7507939, US7494701, US7378625, US7345263, US7223950, US7223087, US7172780, US7138616, US7138616, US7128789, US7122146, US7112771, US7022359, US7007405, US6984352, US6725567, US6682764, US6673158, US6662813, US6607764, US6559430, US6534174, US6455084, US6380524, US6345634, US6344635, US6344634, US6231903, US6229117, US6225611, US6222168, US6197243, US6066838, US5925281, US5858303, US5837977, US5770840, US5736718, US5707676, US5660868, US5593610, US5567455, US5552169, US5520940, US5519196, US5512737, US5467694, US5446270, US5416304, US5396715, US5389767, US5378878, US5365043, US5343024, US5317120, US5306512, US5296666, US5294763, US5282320, US5272302, US5254822, US5230914, US5229563, US5221548, US5220813, US5220141, US5216216, US5206044, US5202541, US5166488, US5144107, US5144105, US5140121, US5140119, US5139826, US5136133, US5124519, US5120500, US5105555, US5101084, US5094863, US5079398, US5077066, US5075526, US5066843, US5057659, US5057331, US5045660, US5026957, US5008507, US4991497, US4988841, US4961944, US4960598, US4952764, US4935276, US4931608, US4926020, US4925682, US4922071, US4906806, US4904836, US4894503, US4891482, US4886948, US4880951, US4874917, US4873101, US4871892, US4870255, US4867995, US4865854, US4851631, US4841112, US4825025, US4822966, US4803324, US4794005, US4786513, US4777053, US4754111, US4748308, US4743726, US4740377, US4734288, US4728762, US4705927, US4703149, US4701585, US4693899, US4689458, US4656325, US4641005, US4640838, US4596713, US4593171, US4590349, US4571337, US4565670, US4560850, US4542271, US4529855, US4512497, US4495392, US4490597, US4478349, US4471195, US4464405, US4454403, US4439656, US4425368, US4416907, US4416906, US4409454, US4409452, US4406861, US4406860, US4405850, US4404241, US4400401, US4398077, US4390555, US4390554, US4388335, US4367241, US4362917, US4354083, US4338102, US4330696, US4318931, US4317017, US4316070, US4306133, US4303455, US4283427, US4280032, US4272663, US4271344, US4262183, US4258630, US4239009, US4223448, US4219573, US4210674, US4190757, US4168334, US4162334, US4144435, US4140889, US4140887, US4126777, US4126776, US4121510, US4117058, US4112833, US4093841, US4057702, US4049938, US4027132, US4013798, US3974354, US3965323, US3946188, US3946187, US3943320, US3941968, US3941967, US3920944, US3849622, US2014370167, US2014166644, US2014065265, US2014048531, US2013273213, US2013186888, US2013011526, US2012308694, US2012006207, US2011315620, US2011226761, US2011204046, US2011168156, US2011120993, US2010282636, US2010230403, US2010215292, US2010176022, US2010163553, US2010139690, US2010077615, US2010015308, US2010000992, US2009311396, US2009272737, US2009257687, US2009200295, US2009121798, US2009078125, US2009013879, US2008199579, US2008138474, US2008110878, US2008069485, US2008017048, US2007284369, US2007284368, US2007187398, US2007160805, US2007125430, US2007116807, US2007110859, US2007108198, US2007108197, US2007108196, US2007102425,

US2007092609, US2006289514, US2006249034, US2006237451, US2006127549, US2006091138, US2006019001, US2005230383, US2005211705, US2005199619, US2005199618, US2005199617, US2005184434, US2005106346, US2004222554, US2004217114, US2004177528, US2004101605, US2004035858, US2003168153, US2003049354, TWI348442, JP63000083, JP62275415, JP53058831, GB2252027, GB2137858, FR2648219, FR2641855, FR2628187, FR2587464, FR2504378, FR2501031, FR2472816, EP1441191, EP1441191, EP0470749, EP0334772, EP0333863, EP0287324, EP0287323, EP0284420, DE3904111, DE3636667, DE3207680, DE3106236, DE29800949, DE2745307, DE102013104956, DE102013104956, DE102011089191, CN103090427, CN102331008, BE1014918, AU619911, AT409322,

Abstract:
Source: US3701872A A process and an implement for converting microwave energy into heat energy which includes a body having a plurality of resistive particles therein. Upon subjecting the particles to microwave irradiation, a plurality of electric arcs are generated throughout the particles, thereby resulting in the microwave energy being converted into heat energy, and the electric arcs serving as a load for the microwave irradiation source. The implement is particularly useful with microwave ovens.



374) Family number: 7663573 (US4046308A)

Title: PACKAGING

Priority:
CA19720136143 19720303 CA19750236153 19750923 GB19710019550 19710609
GB19710010351 19710421 GB19710010352 19710421 GB19710007709 19710324
US19720234105 19720313 US19780930517 19780803 US19770830102 19770902

Family:

Publication number	Publication date	Application number	Application date
CA1009628 A1	19770503	CA19750236153	19750923
CA1009628 A2	19770503	CA19750236153	19750923
CA979404 A1	19751209	CA19720136143	19720303
CH550696 A	19740628	CH19720003665	19720313
DE2210164 A1	19721207	DE19722210164	19720303
FR2131481 A5	19721110	FR19720009706	19720320
GB1374984 A	19741120	GB19710010351	19710421
IT957533 A	19731020	IT19720048722	19720302
US4046308 A	19770906	US19720234105	19720313
US4189986 A	19800226	US19780930517	19780803

Probable Assignee: PAXALL INC

Assignee(s):(std)**:** KEYO LOK CO INC ; PAXALL ; PAXALL INC ; SILVER STANLEY ; SILVER STANLEY MILTON

Assignee(s): THIELE ENGINEERING CO ; SILVER STANLEY M

Inventor(s):(std)**:** SILVER STANLEY M ; SILVER STANLEY MILTON

International class (IPC 8-9): B65B7/20 B65D5/02 B65D5/06 B65D5/72 B65D65/40 (Advanced/Invention);
B65B7/16 B65D5/02 B65D5/72 B65D65/40 (Core/Invention)

International class (IPC 1-7): B31B1/00 B31B1/46 B31B3/26 B31B39/00 B31B7/0 B31B7/00 B31B7/26 B65B1/02 B65D5/02 B65D5/08 B65D5/40 B65D5/56 B65D5/72 B65D65/00 B65D85/00

CPC: B65B7/20 B65D5/06 Y10T428/1352 Y10T428/15 Y10T428/24231 B65D5/062 B65D5/0272

European class: B65B7/20 B65D5/02H B65D5/06 B65D5/06B1

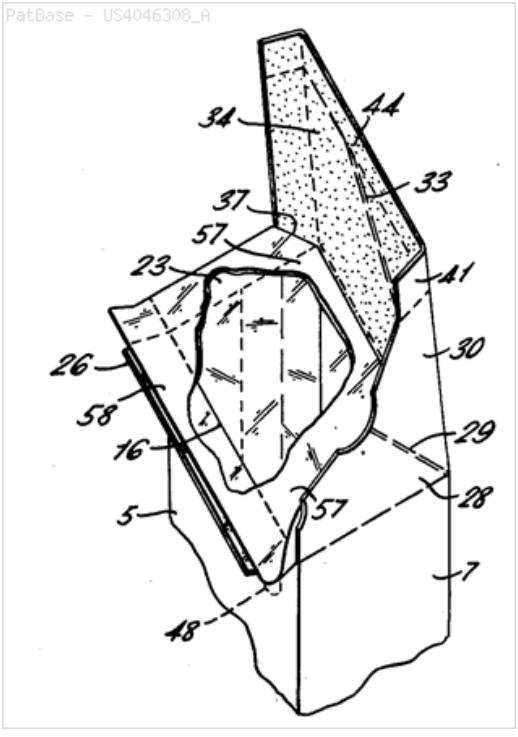
US class: 229/125.34 229/137 229/138 229/17R 428/126 428/35.7 428/43 428/542.8 493/102 493/133 493/164 493/183 493/96 93/36M

Classification Explorer

Cited documents: US3883068 A, US3877630 A, US3829005 A, US3661321 A, US3616987 A, US3577699 A, US3561667 A, US3516336 A, US3411694 A, US3106330 A, US3094265 A, US2792166 A, US2764069 A, US2473391 A,

Forward Citations: US8500946, US7338423, US7211311, US6962556, US6221464, US6195959, US6083603, US5918799, US5794812, US5794811, US5771658, US5666789, US4819411, US4776147, US4598027, US4294642, US2012067882, US2008155943, US2006099381, US2005255979, US2005026762, US2004018330, EP0552928, EP0253549, EP0015661, EP0014560, AU2001286107,

Abstract:
Source: US4046308A A blank which is capable of producing a tube of moisture-resistant material which may be end **sealed** to form a **package**. The blank comprises a substratum of card or the like with a delaminable sheeting thereon. The blank has fold lines defining opposable body walls and at least one end **closure** panel. Flange panels are defined with extensions and allow the formation of a **sealable** fin. Apparatus and method are provided for side seaming such a blank with outfolding of panels to fuse the sheeting into a tube and delaminate the sheeting from the substratum. Apparatus and method are also provided for end **sealing** such a tube, with provision for outfolding of gussets and fusion and delamination of the sheeting to provide an end membrane delaminated from the substratum.



375) Family number: 566566 (US3742676A)

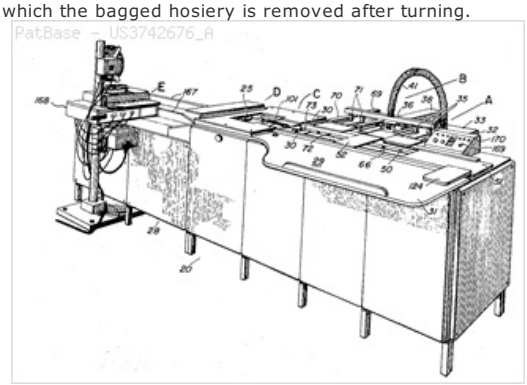
Title:	**PACKAGING** APPARATUS AND METHOD
Priority:	US19710139165 19710430 US19720312044 19721204

Family:

Publication number	Publication date	Application number	Application date
DE2221156 A1	19721116	DE19722221156	19720428
IT953721 A	19730810	IT19720023423	19720419
US3742676 A	19730703	US19710139165	19710430
US3797713 A	19740319	US19720312044	19721204

Probable Assignee:	SPEIZMAN IND INC
Assignee(s):(std):	SPEIZMAN IND INC ; SPREIZMAN IND INC
Assignee(s):	SPREIZMAN INDUSTRIES INC ; SPEIZMAN IND INC US
Inventor(s):(std):	DEAN RANKIN CAROL ; DIXON LAWING BURMAH ; LAWING B ; RANKIN C
Inventor(s):	RANKIN C US ; LAWING B US
International class (IPC 8-9):	B65B25/20 (Advanced/Invention); B65B25/00 (Core/Invention)
International class (IPC 1-7):	A41H33/00 B65B25/20 B65B63/04 D04B
CPC:	B65B25/20
European class:	B65B25/20
US class:	223/37 53/117 53/429 53/469
Classification Explorer	
Cited documents:	US3514019 A, US3448557 A, US3396878 A, US3131838 A, US2758761 A, US1831592 A,
Forward Citations:	US9663254, US6158198, US5230202, US4565047, US4379384, US4106260, US2011131922, DE3528091,

Abstract:
Source: US3742676A An apparatus and method for **packaging** hosiery in an automatic operation that sequentially folds the hosiery about an insert board, places the folded hosiery on an L-board, **bags** the L-board mounted hosiery, and **seals** the **bags**, with the hosiery advancing in a continuous lengthwise direction to and through the various operating stations. Hosiery is initially laid out lengthwise at a folding station at which the hosiery is partially folded automatically, with folding being completed as the hosiery advances lengthwise to a preliminary **packaging** station at which the folded hosiery advances onto an L-board and against the upstanding end flap thereof. The L-board mounted hosiery is advanced to a bagging station at which it is inserted lengthwise into a **bag** that is gripped to hold it stationary during hosiery insertion and is then ungripped to allow the bagged hosiery to advance to a **bag** closing station at which it advances against a stop that causes the hosiery to fully seat in the **bag** and positions the **bag** properly for **sealing**. After the **bag** is **sealed** it is turned over lengthwise by oscillation of a turning plate on which the bagged hosiery is received at the **bag** closing station, from which the bagged hosiery is removed after turning.



376) Family number: 1067095 (US3804512A)

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Title: COPYING APPARATUS FOR SHEET ORIGINALS AND THICKER ORIGINALS

Priority:

AU19720043049 19720602	CA19720143844 19720605	CA19760244073 19760122
DK19720002760 19720602	CA19760244074 19760122	DE19722226358 19720530
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US19780893825 19780405		

Family:

Publication number	Publication date	Application number	Application date
AU197243049 A1	19731213	AU19720043049	19720602
BG26823 A3	19790612	BG19720020688	19720609
CA1011801 A1	19770607	CA19720143844	19720605
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CH555058 A	19741015	CH19720008301	19720605
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DD117549 C	19760112	DD19720181928	19720602
DD117931 C	19760205	DD19720182036	19720602
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DE2226358 C3	19800626	DE19722226358	19720530
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DE2264820 B2	19791025	DE19722264820	19720530
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DK377379 A	19790910	DK19790003773	19790910
DK387575 A	19750828	DK19750003875	19750828
FR2141765 A1	19730126	FR19720020004	19720602
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GB1400724 A	19750723	GB19720025731	19720601
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HU171863 P	19780428	HU1972CA00330	19720602
IT958178 A	19731020	IT19720050643	19720531
JP48007676 U1	19730127	JP19710048632U	19710609
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SE7508773 A	19750804	SE19750008773	19750804
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US3804512 A	19740416	US19720258820	19720601
US4009955 A	19770301	US19750583247	19750603
US4013354 A	19770322	US19750581546	19750528
US4071295 A	19780131	US19750573144	19750430
US4088872 A	19780509	US19750629672	19751106
US4190464 A	19800226	US19770860457	19771214
US4222659 A	19800916	US19780908829	19780523
US4270857 A	19810602	US19780893825	19780405
US4319828 A	19820316	US19790050648	19790621
US4437757 A	19840320	US19810227209	19810122
YU145172 A	19791031	YU19720001451	19720601
YU34945 B	19800430	YU19720001451	19720601

Probable Assignee: CANON KK

Assignee(s):(std)**:** CANON K K TOKIO ; CANON KABUSHIKI ; CANON KK JP ; CANON KABUSHIKI KAISHA JP ; CANON KABUSHIKI KAISHI ; HATTORI HIROYUKI ; HATTORI HIROYUKI JP ; IIDA TOSHIHIDE JP ; IIDA TOSHIHIDE ; HITACHI PLANT ENG AND CONSTR CO ; MIYAMOTO KOICHI JP ; SAKAMAKI HISASHI JP ; KOMORI SHIGEHIRO JP ; UMEZAWA KAZUMI JP ; SAKAMAKI HISASHI ; MIYAMOTO KOICHI ; KOMORI SHIGEHIRO ; UMEZAWA KAZUMI ; CANON KK

Assignee(s): CANON KK JA ; CANON KABUSHIKI KAISHA ; CANON K K TOKIO TOKYO JP ; CANON K K TOKYO JP ; CANON JA KK ; CANON JP KK ; CANON K K

Inventor(s):(std)**:** ASAMI KINICHIROU ; H HATTORI ; H SAKAMAKI ; HATTORI H ; HATTORI HIROYUKI ; HATTORI HIROYUKI JP ; HATTORI HIROYUKI MITAKA ; HIROYUKI H ; HIROYUKI HATTORI ; HISASHI S ; HISASHI SAKAMAKI ; IIDA T ; IIDA TOSHIHIDE ; IIDA TOSHIHIDE ING ; IIDA TOSHIHIDE JP ; K MIYAMOTO ; K UMEXAWA ; K UMEZAWA ; KAZUMI U ; KAZUMI UMEZAWA ; KOICHI M ; KOICHI MIYAMOTO ; KOMORI S ; KOMORI SHIGEHIRO ; KOMORI SHIGEHIRO ING ; KOMORI SHIGEHIRO JP ; KONORI SHIGEHIRO ; KONORI SHIGEHIRO JP ; LIDA T ; LIDA TOSHIHIDE ; LIDA TOSHIHIDE JP ; MIYAMOTO K ; IIDA TOSHIDE ; MIYAMOTO KOICHI ; MIYAMOTO KOICHI ING ; MIYAMOTO KOICHI JP ; MIYAMOTO MOICHI ; MOICHI MIYAMOTO ; OOSAKI YUKIMASA ; S KOMORI ; SAKAMAKI H ; SAKAMAKI HISASHI ; SAKAMAKI HISASHI JP ; SHIGEHIRO K ; SHIGEHIRO KOMORI ; T IIDA ; TOKIO ; TOSHIHIDE I ; TOSHIHIDE LIDA ; TOYODA NAOKI ; UMEXAWA K ; UMEZAWA K ; UMEZAWA KAZUMI JP ; UMEZAWA KAZUMI UMEZAWA ; UMEZAWA KAZUMI ; UMEZAWA KAZUMI ING ; UMEZAWA KAZUMI YOKOHAMA KANAGAWA ; UPEZAWA K ; YOKOHAMA KANAGAWA

Inventor(s): UMEZAWA KAZUMI YOKOHAMA KANAGAWA JAPAN ; UMEZAWA KAZUMI YOKOHAMA KANAGAWA JP ; UMEZAWA KAZUMI ING YOKOHAMA KANAGAWA JP ; UMEZAWA KAZUMI YOKOHAMA JAPAN ; UMEZAWA KAZUMI YOKOHAMA JP ; UMEZAWA K JA ; TOSHIHIDE IIDA ; SAKAMAKI HISASHI YOKOHAMA KANAGAWA JP ; SHIGEHIKO KOMORI HISASHI SAKAMAKI HIROYUKI HATTORI TOSHIHIDE HUA KOICHI MIYAMOTO AND KAZUMI UMEZAWA ; SAKAMAKI H JA ; MIYAMOTO KOICHI TOKIO ; MIYAMOTO KOICHI TOKIO TOKYO JP ; MIYAMOTO KOICHI TOKYO JP ; MIYAMOTO KOICHI ING TOKYO JP ; IIDA TOSHIDE TOKIO ; MIYAMOTO K JA ; KOMORI S JA ; KAZUMI UEMEZAWA ; IIDA TOSHIHIDE TOKIO ; IIDA T JA ; HATTORI HIROYUKI MITAKA JP ; HATTORI HIROYUKI MITAKA TOKIO ; HATTORI HIROYUKI MITAKA TOKIO TOKYO JP ; HATTORI HIROYUKI MITAKA TOKYO JP ; HATTORI H JA

International class (IPC 8-9): B65H1/00 B65H23/06 E05D7/00 F16C11/04 F24F13/06 G03B27/00 G03B27/32 G03B27/50 G03B27/52 G03B27/62 G03G15/00 G03G15/04 G03G15/10 G03G15/14 G03G15/16 G03G15/22 G03G15/30 G03G21/00 G03G21/20 G03G9/08 G06M3/02 H05K7/00 (Advanced/Invention);
G03B27/12 (Advanced/Non-invention);
B65H1/00 B65H23/06 E05D7/00 F16C11/04 G03B27/00 G03B27/32 G03B27/50 G03B27/52 G03B27/62 G03G15/00 G03G15/04 G03G15/10 G03G15/14 G03G15/16 G03G21/00 G03G9/08 G06M3/00 H05K7/00 (Core/Invention);
G03B27/02 (Core/Non-invention);
B41L G03G (Subclass/Invention)

International class (IPC 1-7): B08B3/12 B08B6/00 B08B7/00 B41L B65H23/06 B65H3/06 B65H7/00 B65H7/18 B65H9/04 F16C11/04 F24F13/06 G03B17/50 G03B27/00 G03B27/06 G03B27/12 G03B27/32 G03B27/42 G03B27/50 G03B27/52 G03B27/62 G03G13/00 G03G13/22 G03G15/00 G03G15/04 G03G15/06 G03G15/10 G03G15/12 G03G15/14 G03G15/16 G03G15/20 G03G15/22

CPC: G03G21/206 G03G21/203 G06M3/02 G03G15/30 G03G15/302 G03G21/20 G03G21/00 G03G15/16

European class: G03G15/16 G03G15/30 G03G15/30A G03G21/00 G03G21/20 G06M3/02

US class: 134/6 235/132A 235/132R 235/91R 271/160 271/170 271/242 271/311 271/4.01 271/4.08 355/14R 355/15 355/2.5 355/25 355/27 355/30 355/3DR 355/3R 355/3SH 355/51 355/8 399/151 399/160 399/203 399/209 399/213 399/349 399/362 399/377 399/394 399/398 399/92 399/96 399/99

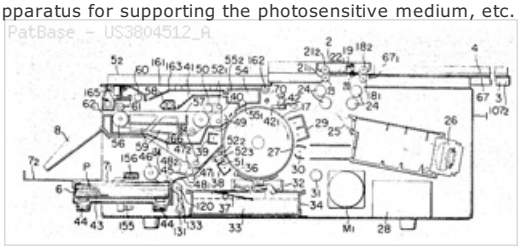
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Cited documents: US3873196 A, US3859691 A, US3804512 A, US3784297 A, US3776632 A, US3770345 A, US3759220 A, US3743406 A, US3741646 A, US3740133 A, US3740132 A, US3734604 A, US3731874 A, US3728015 A, US3725059 A, US3711796 A, US3710079 A, US3706489, US3695756 A, US3689146 A, US3685905 A, US3684363 A, US3677635 A, US3677632 A, US3659084 A, US3653756 A, US3649115 A, US3647293 A, US3637306 A, US3634007 A, US3620617 A, US3600086, US3597074 A, US3594079 A, US3592540 A, US3588244 A, US3560087 A, US3552849 A, US3536397 A, US3536395 A, US3510218 A, US3506347 A, US3490841 A, US3483372 A, US3480361, US3464680 A, US3450995 A, US3397627 A, US3378254 A, US3357325 A, US3291466 A, US3190200 A, US3062109 A, US3062094 A, US2904251 A, US2889758 A, US2624652 A, US2357809 A, JP48035981 A2, JP46013073 U1, JP43018544 Y1, JP42002630 Y1, JP39004300 A2, FR2013167 A1, FR1551059 A, DE7023950 U, DE1964853 A1, DE1958775 A1, DE1907018 A1, DE1497170 A1, DE1497152 A1, DE1261758 A,

Forward Citations: US9195213, US7896337, US7035574, US6295114, US6262756, US6181889, US5788382, US5592274, US5555808, US5530521, US5480131, US5307133, US4986528, US4879578, US4790524, US4771313, US4736255, US4720727, US4714337, US4707111, US4682769, US4671502, US4666286, US4627709, US4619515, US4608704, US4607936, US4589760, US4585319, US4579333, US4530591, US4521099, US4519697, US4500195, US4436408, US4422756, US4395118, US4387986, US4372547, US4367036, US4366219, US4317630, US4270857, US4260241, US4234305, US4222105, US4134669, US4134667,

US4099861, US4033694, US4009957, US4009955, US3999851, US3981576, US3948586, US2014376950, US2009173542, US2008216690, US2004240908, US2004197123, JP62116427, JP59101258, JP58163311, JP55142370, JP54034840, JP53124439, JP50131446, JP50051740, FR2430034, FR2369603, FR2369603, FR2347713, FR2347713, EP0529490, EP0406892, EP0346220, EP0253672, EP0136902, EP0072911, EP0065308, EP0001128, DE3806286, DE3531775, DE3434401, DE3431242, DE3044346, DE2812834, DE2659661, DE2560431, DE2547355, DE2547299, DE2542231, DE2409209,

Abstract:
Source: US3804512A A copying apparatus for selectively copying sheet originals and thicker originals such as books and the like comprises various process devices as used in an electrophotographic copying apparatus of the type which employs the liquid development and drum type image transfer system. The copying apparatus of the invention includes improvements in such devices as original carriage, original transport apparatus, guide for original carriage, original keep **cover**, apparatus for controlling the operation of the copying apparatus, apparatus for detecting the amount of toner in developing liquid, copy paper feed apparatus, apparatus for controlling the paper feed apparatus, apparatus for separating copy paper from a photosensitive drum, apparatus for conveying copy paper from the feed apparatus to a discharge port, apparatus for repeating copying operation, apparatus for drying and fixing the image on the copy paper, apparatus for supporting the photosensitive medium, etc.



377) Family number: 8067195 (US3807788A)

Title: COMBINATION SERVICE TRUCK AND **DISPENSING** EQUIPMENT

Priority:
CA19720143169 19720526 CA19750232567 19750730 US19710240163 19710331
US19750632625 19751117 US19730418835 19731126 US19720240163 19720331
US19770824640 19770815 US19790073696 19790910

Family:

Publication number	Publication date	Application number	Application date
AU197242700 A1	19731129	AU19720042700	19720525
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IT960800 A	19731130	IT19720050669	19720603
US3807788 A	19740430	US19720240163	19720331
US3957159 A	19760518	US19730418835	19731126
US4056194 A	19771101	US19750632625	19751117
US4216728 A	19800812	US19770824640	19770815
US4247144 A	19810127	US19790073696	19790910

Probable Assignee: READY METAL MFG CO

Assignee(s):(std)**:** READY METAL MANUF CY US ; READY METAL MFG CY ; READY METAL MFG CO ; READY METAL MFG ; READY METAL MFG COMPANY

Assignee(s): READY METAL MANUFACTURING CO CHICAGO ILL V ST A ; READY METAL MFG CY 4500 WEST 47TH STREET CHICAGO I ; READY METAL MFG CY 4500 WEST 47TH STREET CHICAGO ILLINOIS E U A ; READY METAL MFG CY 4500 WEST 47TH STREET CHICAGO ILLINOIS EUA ; READY METAL MFG CO US ; READY METAL MANUFACTURING COMPANY ; READY METAL MFG CO CHICAGO ILL V ST A ; READY METAL MANUFACTURING CO ; LASALLE BUSINESS CREDIT INC ; RADEK JOHN R

Inventor(s):(std)**:** RADEK J ; RADEK J R ; RADEK JOHN R ; RADEK JOHN RICHARD

Inventor(s): RADEK JOHN RICHARD HINSDALE ILL V ST A ; RADEK J US ; J R RADEK ; JOHN RICHARD RADEK ; JR RADEK

International class (IPC 8-9): A47F5/02 B60P3/00 B60P3/025 B60P3/14 B60R11/06 B65D88/12 (Advanced/Invention);
A47F5/02 B60P3/00 B60P3/025 B60P3/14 B60R11/00 B65D88/00 (Core/Invention)

International class (IPC 1-7): A47B23/00 A47B41/04 A47B49/00 A47F1/00 A47F3/14 A47F5/00 A47F5/02 A47F5/14 B60P3/00 B60P3/02 B60P3/14 B60R11/00 B60R11/06 B62D33/00 B62D33/04 B65D88/12 E05B73/00

CPC: A47F5/02 B60P3/007 B60P3/14 B60R11/06

European class: A47F5/02 B60P3/00D B60P3/14 B60R11/06

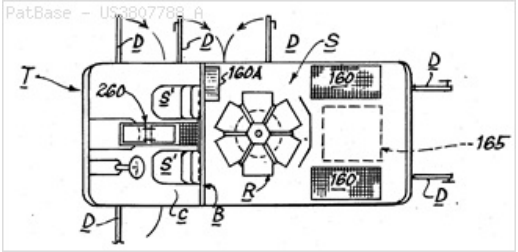
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Classification Explorer

Cited documents: US971389 A, US867996 A, US514771 A, US4044694 A, US3946678 A, US3791528 A, US3705654 A, US3685664 A, US3674156 A, US3641950 A, US3584915 A, US355219 A, US3371974 A, US3300056 A, US3295471 A, US323339 A, US3202295 A, US3162462 A, US3073431 A, US2898170 A, US2867484 A, US2799967 A, US2792267 A, US2750051 A, US2678253 A, US2364479 A, US2167731 A, US2133856 A, US2121711 A, US2069852 A, US2033433 A, US1977400 A, US1970955 A, US1796496 A, US1729956 A, US1711202 A, US1635201 A, US1629939 A, US1473850 A, US144924 A, US1449065 A, NO90752 A, GB493567 A, GB385744 A, GB336486 A, FR359328 A, DK87072 A, CH117246 A,

Forward Citations: WO9212026, USD654727, USD523681, USD436137, US9434321, US9328957, US9095974, US9027768, US8950601, US8534472, US8342343, US8246127, US8127945, US8042698, US7886418, US7819798, US7219952, US7182396, US6523700, US6502707, US6270138, US6267253, US6227633, US6206493, US6189945, US6126218, US5884957, US5727700, US5498048, US5402979, US5076630, US5015025, US4767011, US4673090, US4657147, US4258966, US4126366, US4087126, US3905896, US2016338220, US2016009231, US2014231368, US2012200208, US2011062094, US2011036790, US2008309107, US2008291611, US2008156749, US2008116093, US2008066283, US2008011697, US2007156018, US2006226671, US2006033359, US2006033351, US2005194327, GB2212115, GB2212115, GB2158784, GB2158784, FR2622809, EP1679020, EP0958963, EP0958963, EP0302555, DE3211941, CN105686385, CN101849751, BE1002695, AU572659,

Abstract:
Source: US3807788A A truck for service men and **storage** and **dispensing** equipment housed therein. The truck body may be standard or modified to accept the **storage** equipment which is specially designed for convenient removability and access, maximum **storage** space and easy installation. A major component of the invention is a rotary **storage** facility having a plurality of vertically disposed sections any one of which may be moved into and locked in access position. The truck body is provided with **openings** on sides and back to permit manual access to various **storage** elements. The cab portion is more or less insulated from the rear **storage** space. Special removable means is provided in the cab for supporting documentary material. Other **storage** facilities may be removably secured within the body to make maximum use of available space. The **storage** facilities are of knockdown construction to permit convenient installation in and removal from the truck body as well as compact packing for transport or **storage** in a minimum of space.



378) Family number: 8404053 (US3924008A)

Title: Flexible pouches for carbonated beverages

Priority: GB19710029904 19710625 GB19710029905 19710625 GB19710060732 19711230

Family:

Publication number	Publication date	Application number	Application date
AT323049 B	19750625	AT19720005460	19720626
BE785451 A	19721227	BE19720785451	19720626
CA957303 A1	19741105	CA19720145589	19720623
CH535168 A	19730331	CH19720009466	19720623
CH542760 A	19731015	CH19720009465	19720623
CS170190 B2	19760827	CS19720004512	19720626
DE2231133 A1	19730111	DE19722231133	19720626
DE2231134 A1	19721228	DE19722231134	19720626
DK133089 B	19760322	DK19720003144	19720623
DK133089 C	19760823	DK19720003144	19720623
FR2143269 A1	19730202	FR19720022520	19720622
FR2143269 B1	19780310	FR19720022520	19720622
FR2143270 A1	19730202	FR19720022521	19720622
GB1370803 A	19741016	GB19710029904	19710625
HU166104 P	19750128	HU1972IE00511	19720623
IE36489 B	19761110	IE19720000808	19720609
IE36489 L	19721225	IE19720000808	19720609
IT966655 A	19740220	IT19720025996	19720621
JP53026559 B4	19780802	JP19720063313	19720626
LU65585 A	19730706	LU19720065585	19720622
MY7500281 A	19751231	MY19750000281	19751231
NL7208633 A	19721228	NL19720008633	19720623
SE394650 B	19770704	SE19720008172	19720621
SE394650 C	19771013	SE19720008172	19720621
US3924008 A	19751202	US19720264873	19720621
ZA7203998 A	19730328	ZA19720003998	19720612

Probable Assignee: ICI LTD

Assignee(s):(std)**:** ICI LTD

Assignee(s): IMP CHEM IND LTD ; IMP CHEMICAL ; IMP CHEMICAL IND LTD ; IMP CHEMICAL IND LTD IMP CHEMICAL HOUSE MILLBANK LONDON SW1P 4QG GR BR ; IMPERIAL CHEMICAL ; IMPERIAL CHEMICAL INDUSTRIES LIMITED ; IMPERIAL CHEMICAL INDUSTRIES LTD ; IMPERIAL CHEMICAL INDUSTRIES LTD LONDON ; IMPERIAL CHEMICAL INDUSTRIES LTD IMPERIAL CHEMICAL ; IMPERIAL CHEM IND LTD ; IMPERIAL CHEMICAL INDUSTRIES LTD IMPERIAL CHEMICAL HOUSE MILLBANK LONDON SW1P 4QG GR BR ; RIDLEY DENNIS ; FORD ANDREW G

Inventor(s):(std)**:** RIDLEY DENNIS ; RIDLEY D ; FORD ANDREW GEORGE ; FORD A G ; FORD A ; DENNIS RIDLEY ; ANDREW GEORGE FORD ; FORD ANDREW G

Inventor(s): RIDLEY DENNIS WELWYN GARDEN CITY ; A G FORD ; D RIDLEY ; GEORGE FORD ANDREW ; FORD ANDREW GEORGE HITCHIN

International class (IPC 8-9): B65B31/02 B65D33/02 B65D33/16 B65D75/38 B65D75/58 B65D77/30 (Advanced/Invention);
B65D75/48 (Advanced/Non-invention);
B65B31/02 B65D33/02 B65D33/16 B65D75/38 B65D75/52 B65D77/22 (Core/Invention);
B65D75/00 (Core/Non-invention);
B65D (Subclass/Invention)

International class (IPC 1-7): B65B3/00 B65B31/02 B65B31/06 B65D17/00 B65D3/04 B65D33/00 B65D33/02 B65D33/16 B65D33/24 B65D37/00 B65D47/12 B65D53/00 B65D75/08 B65D75/12 B65D75/38 B65D77/06 B65D77/30 B65D81/00 B65D81/18 B65D81/20 B65D83/14 B65D85/00 B65D85/72 B65D88/16

CPC: B65D33/02 B65D33/1691 B65D75/38 B65D75/48 B65D75/5894

European class: B65D33/02 B65D33/16H B65D75/38 B65D75/58J L65D75/48

US class: 383/119 426/106 426/115 426/123

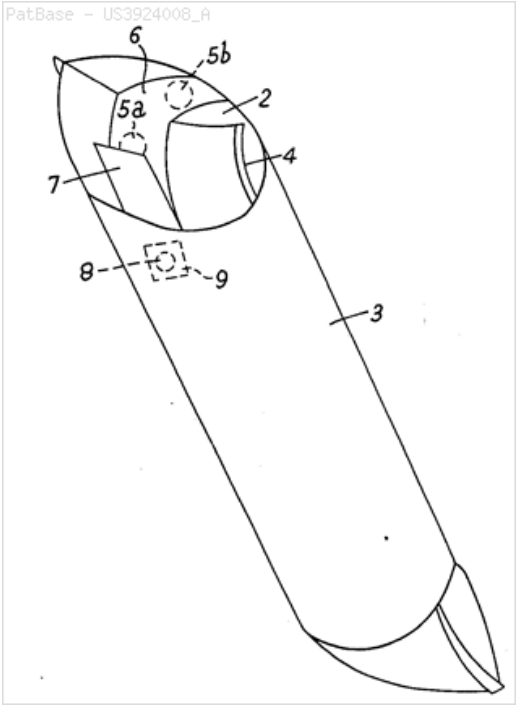
Classification Explorer

Cited documents: US3650458 A, US3620774 A, US3567111 A, US3282411 A, US3281009 A, US3240327 A, US3228585 A, US3208640 A, US3166226 A, US3106329 A, US2757855 A, US2218670 A, US1916854 A,

Forward Citations: WO9622923, WO09149842, WO06121598, WO04041656, USD588932, USD584168, USD580783, USD580782, USD573037, USD571672, US9771174, US9751661, US8562274, US8083102, US8028502, US7950864, US7722254, US7661560, US7658286, US7651290, US7611102, US7584593, US5765341, US5647480, US4367842, US4232048, US4090343, US2010281822, US2010218462, US2010150478, US2009324783, US2009101651, US2009095369, US2009080813, US2008226200, US2008185405, US2008131244, US2008098697, US2008085065, US2008072547, US2007241151, US2007217717, US2007211967, US2007189644, US2007147942, US2007134048, US2007110344, US2006062497, US2005271306, US2003149500, JP6121531, JP2015525717, GB2208222, EP2872412, EP0060411, EP0030054, DE29906747, AU2006246413,

Abstract:
Source: US3924008A A **package** comprising a plastics-film tubular pouch with liquid contents at superatmospheric pressure, cylindrical and with a supporting sleeve over the major part of its length, but with saddle-shaped ends, one of which is provided with an emptying port.

PatBase - US3924008_A



379) Family number: 1194674 (GB1386504A)

Title: **CONTAINER**

Priority: DE19712146463 19710916

Family:

Publication number	Publication date	Application number	Application date
BE788857 A	19730102		00000000
BE788857 A1	19730102	BE19720122048	19720915
DE2146463 A1	19730329	DE19712146463	19710916
FR2153993 A5	19730504	FR19720032420	19720913
GB1386504 A	19750305	GB19720042725	19720914
NL7212458 A	19730320	NL19720012458	19720914

Probable Assignee: HUELS CHEMISCHE WERKE AG

Assignee(s):(std)**:** ALKOR OERLIKON PLASTIC GMBH ; HUELS CHEMISCHE WERKE AG

Assignee(s): CHEMISCHE WERKE HULS ; CHEMISCHE WERKE HUELS AG ; ALKOR OERLIKON PLASTIC GMBH 8090 WASSERBURG ; CHEMISCHE WERKE HUELS AG 4370 MARL ; HULS A G A MARL ALLEMAGNE ; HULS A G ; HULS AG ; ALKOR OERLIKON PLASTIC ; ALKOR OERLIKON PLASTIC G M B H ; ALKOR OERLIKON PLASTIC G M B H CHEMISCHE WERKE ALKORSTRASSE WASSERBURG

Inventor(s):(std)**:** VIELHABER ERICH ; SIMONS WOLFGANG ; LUTHER KARL HEINZ ; KALIWODA KARL ; HAMBERGER KARL ; GRONENBERG OTTO DIPL ING ; DOPATKA KARL HEINZ ; BENDER HELLMUTH ; BAUMANN GERHARD

Inventor(s): HAMBERGER KARL 8091 PENZING

International class (IPC 8-9): B65D90/04 (Advanced/Invention)

International class (IPC 1-7): B65D25/16 B65D25/40 B65D47/00 B65D77/00 B65D87/00 B65D89/00 B65D89/08 B65J

CPC: B65D90/047 B65D2590/046

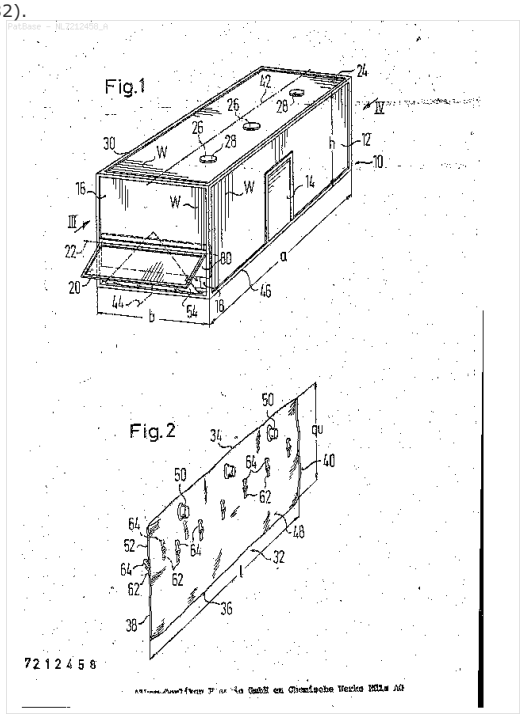
European class: B65D90/04D2 L65D590/04D6

Classification Explorer

Forward Citations: WO9745340, US5199793, US4441627, GB2329374, GB2329374, GB2207418, GB2207418, EP2311757, EP0907586,

Abstract:

Source: GB1386504A 1386504 **Containers** ALKOR-OERLIKON PLASTIC GmbH and CHEMISCHE WERKE HULS AG 14 Sept 1972 [16 Sept 1971] 42725/72 Heading B8P A **container** 10 for flowable goods has an **openable** flap 20 in one end wall 16 and is lined with a flat synthetic plastics **bag** (32) so disposed within the **container** that a **bag** lappet 54, serving as an outlet pipe is formed adjacent the flap 20. The **container** is made of corrugated sheet metal and has **openings** 26 in its top co-operating with filling pipes (50) of the liner **bag**. The liner **bag** is fixed in the **container** by means of hooks (64) welded to the **bag** engaging rods (66) secured to the inner longitudinal **container** edges and clamping strips (72) clamping the **bag** lappets (58, 60) opposite the wall 16 against the **container** transverse edges. Alternatively, the upper **bag** lappets (56, 60) may be secured on winding mandrels (57, 61). The outlet **bag** lappet 54 is passed beneath a cylindrical rod (78) and is supported between the flap 20 and a removable plate 80. In modifications, the removable plate 80 is replaced either by a plate (102) having at its base a cylindrical rod (104) and pivotable to be attachable to the **container** top, or by a pivoted plate (204) having a cylindrical rod (208) at its base and comprising two hingedly connected parts which are attachable to the inside of the **container** end wall 16. The **container** is emptied by removing the tip (98) of the **bag** lappet 54, supporting the **bag** lappet 54 on a plate (92, 111 or 211) and guiding it into a hopper (94) or attaching to it an outlet pipe (106 or 206) having a shut-off slider (112 or 212), and tilting the **container** by means of hydraulic lifting gear (86) of a tipping platform (82).



380) Family number: 7170696 (US3711011A)

Title:	RESEALABLE PACKAGING DEVICE
Priority:	US19700034021 19700504

Family:

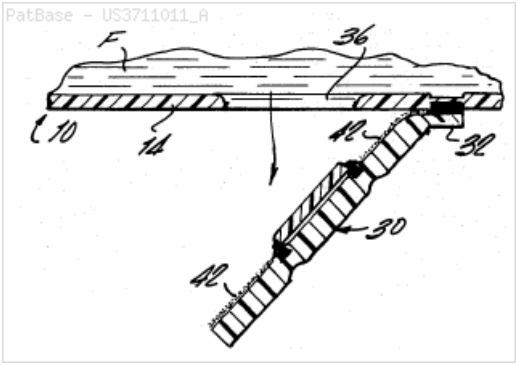
Publication number	Publication date	Application number	Application date
US3711011 A	19730116	US19700034021	19700504

Probable Assignee:	ACTION PACKAGING CORP
Assignee(s):(std):	ACTION PACKAGING CORP
Assignee(s):	ACTION PACKAGING CORP US
Inventor(s):(std):	KUGLER R
Inventor(s):	KUGLER R US
International class (IPC 8-9):	B65D75/58 (Advanced/Invention); B65D75/52 (Core/Invention)
International class (IPC 1-7):	B65D17/06 B65D33/16 B65D37/00
CPC:	B65D75/5838 B65D2575/586
European class:	B65D75/58E1A L65D575/58R
US class:	222/541.9 229/123.1 229/125.09 383/203 383/205 383/211 383/66 383/96

Classification Explorer

Cited documents:	US3528601 A, US3520469 A, US3396900 A, US3373916 A, US3321123 A, US3315801 A, US3203621 A, US3101879 A, US3094269 A, US2738916 A, US1915503 A,
Forward Citations:	WO8702645, WO17036984, WO09015006, WO06117818, USRE40284, USRE39505, US9867493, US9790076, US9462815, US9242779, US8597071, US8281956, US7648024, US7584843, US7008106, US6712509, US6663283, US6575625, US6439770, US6419391, US6286999, US6279298, US6244455, US6148588, US6071011, US6022145, US5997177, US5904425, US5893645, US5887980, US5855435, US5833368, US5829672, US5741075, US5725312, US5606846, US5513915, US5486051, US5452849, US5378066, US5366087, US5310262, US5269404, US5217307, US5115947, US5069372, US5035518, US5018646, US4988016, US4830273, US4770295, US4723301, US4712737, US4632299, US4552269, US4438850, US4386720, US4274541, US4258876, US4156493, US4105144, US3990615, US3977562, US3833154, US2015264943, US2014335239, US2014158690, US2009272761, US2009081925, US2009019619, US2007012711, US2006133700, US2004140240, GB2189461, GB2189461, EP3050820, EP0540923, EP0471211, EP0086214, EP0060411, DE3700988,

Abstract:
Source: US3711011A A fluid-containing bag made of flexible heat sealable plastic material in which the internal cavity of bag is completely sealed and an openable and resealable spout. The spout may be opened by pulling up on a sealing tab which is permanently attached to the bag adjacent a pouring location and which is fixed to the wall material of the bag at the point where the pouring orifice is to be formed. The initial pulling of the tab tears open the bag at the point at which the orifice area is fixed to the bag thereby opening the orifice. The tab may be resealed against the outside face of the bag and may reseal the orifice by means of adhesive material between the tab and the bag wall.



381) Family number: 1516218 (US3712503A)

Title: FULL **OPEN** END **CLOSURE**

Priority: CA19740190525 19740121 US19710195095 19711103 US19740531861 19741212 US19730325361 19730122

Family:

Publication number	Publication date	Application number	Application date
AU197248515 A1	19740509	AU19720048515	19721103
AU197464736 A1	19750821	AU19740064736	19740122
AU471624 B2	19760429	AU19740064736	19740122
AU472668 B2	19760603	AU19720048515	19721103
BE790950 A	19730301		00000000
BE790950 A1	19730301	BE19720123812	19721103
CA1024915 A1	19780124	CA19740190525	19740121
CA1046859 A1	19790123	CA19770290422	19771108
CA1046859 A2	19790123	CA19770290422	19771108
CA962615 A1	19750211	CA19720155418	19721102
CH546179 A	19740228	CH19720016077	19721103
DE2253437 A1	19730510	DE19722253437	19721031
DE2402686 A1	19740725	DE19742402686	19740121
FR2158505 A1	19730615	FR19720039008	19721103
FR2158505 B3	19741031	FR19720039008	19721103
GB1383067 A	19750205	GB19720050820	19721103
GB1464276 A	19770209	GB19740002826	19740121
GB1464277 A	19770209	GB19750001748	19740121
IT966860 A	19740220	IT19720053728	19721031
JP48062581 A2	19730831	JP19720110161	19721102
JP49104787 A2	19741003	JP19740009656	19740122
NL7214778 A	19730507	NL19720014778	19721101
NO135778 B	19770221	NO19720003963	19721102
NO135778 C	19770601	NO19720003963	19721102
SE382957 B	19760223	SE19720014229	19721102
SE382957 C	19760603	SE19720014229	19721102
US3712503 A	19730123	US19710195095	19711103
US3875884 A	19750408	US19730325361	19730122
US3964633 A	19760622	US19740531861	19741212
ZA7207553 A	19730725	ZA19720007553	19721024

Probable Assignee: AMERICAN NATIONAL CAN A CORP OF DE CORP

Assignee(s):(std)**:** NAT CAN CORP

Assignee(s): NAT CAN CORP US ; NATIONAL CAN CORP ; NATIONAL CAN CORP 5959 SOUTH CICERO AVENUE CHICAGO ILLINOIS60638 E U A ; NATIONAL CAN CORP CHICAGO ILL V ST A ; NATIONAL CAN CORP US ; ZUNDEL ARTHUR P ; AMERICAN NATIONAL CAN A CORP OF DE CORP ; AMERICAN NATIONAL CAN CORP

Inventor(s):(std)**:** ZUNDEL A ; ZUNDEL A P ; ZUNDEL ARTHUR P

Inventor(s): ZUNDEL ARTHUR P CARY ILL V ST A ; ZUNDEL ARTHUR P MOUNT PROSPECT ILL V ST A ; ZUNDEL A US ; A P ZUNDEL ; AP ZUNDEL ; ARTHUR P ZUNDEL

International class (IPC 8-9): B21D51/38 B21D51/44 B65D1/16 B65D17/00 B65D17/34 B65D17/347 B65D17/35 B65D17/353 B65D41/42 (Advanced/Invention);
B21D51/38 B65D1/00 B65D17/00 B65D17/28 B65D41/32 (Core/Invention);
B65D B67B (Subclass/Invention)

International class (IPC 1-7): B21D51/38 B21D51/44 B21D53/00 B65D1/16 B65D17/00 B65D17/02 B65D17/16 B65D17/20 B65D17/24 B65D41/32 B65D41/42 B67B

CPC: B65D17/404 B65D17/4011 B21D51/383

European class: B21D51/38B B65D17/16B1 B65D17/24

US class: 113/121C 220/272 220/273 220/5.4 220/54 413/12 413/14

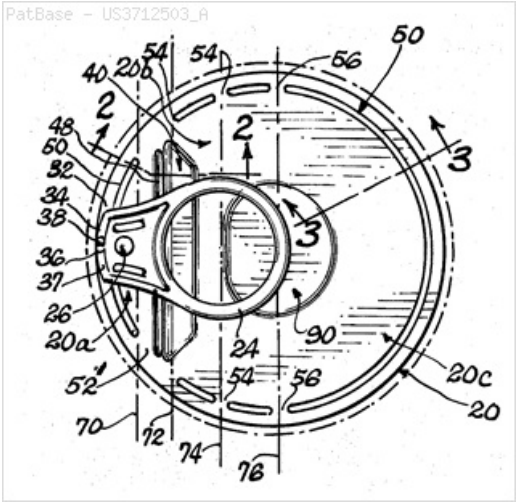
Classification Explorer

Cited documents: US3712503 A, US3698590 A, US3662916 A, US3653536 A, US3601279 A, US3583348 A, US3478918 A, US3441170 A, US2187433 A, US2047830 A, JP48040553 A2,

Forward Citations: WO9916676, WO9118796, WO8902854, WO16177754, WO13090235, WO13090235, USD694108, US9850024, US8646643, US8336727, US6837093, US6575684, US6427860, US6161717, US5655401, US4915246, US4518639, US4511299, US4254890, US4216736, US3996867, US3970023, US3964633, US3958354, US2015259094, US2010258562, US2002170913, JP63141147, JP2007153428, FR2684963, FR2502122, EP1044886, EP0896929, EP0061980,

Abstract:
Source: US3712503A A full **open** end that is permanently seamed onto one end of the **container** body with a peripheral score line in the end defining a removable section. The removable section incorporates means for preventing crowning between opposite edges of the section as the section is removed from the **container** body.

PatBase - US3712503_A



382) Family number: 8290674 (US4278744A)

Title: EXPANDABLE CASING FOR ELECTRO-CHEMICAL CELLS

Priority: US19690822661 19690507 US19710187762 19711008 US19750643588 19751219 US19780873046 19780127

Family:

Publication number	Publication date	Application number	Application date
BE789783 A	19730201		00000000
BE789783 A1	19730201	BE19720122845	19721006
CA1019394 A1	19771018	CA19720152556	19720926
CH542520 A	19730930	CH19720014471	19721004
DE2248276 A1	19730412	DE19722248276	19721002
DE2248276 B2	19770616	DE19722248276	19721002
DE2248276 C3	19780126	DE19722248276	19721002
FR2156104 A1	19730525	FR19720035458	19721006
FR2156104 B1	19770401	FR19720035458	19721006
GB1346011 A	19740206	GB19720046197	19721006
IL40504 A0	19721229	IL19720040504	19721004
IL40504 A1	19760930	IL19720040504	19721004
IT968698 A	19740320	IT19720030177	19721006
JP48045830 A2	19730630	JP19720100736	19721009
JP56032736 B4	19810729	JP19720100736	19721009
NL7213656 A	19730410	NL19720013656	19721009
SE409924 B	19790910	SE19720012862	19721005
SE409924 C	19791220	SE19720012862	19721005
US4278744 A	19810714	US19780873046	19780127

Probable Assignee: DURACELL INT

Assignee(s):(std)**:** MALLORY AND CO INC P R ; DURACELL INT

Assignee(s): DURACELL INT INC ; DURACELL INTERNATIONAL INC ; ATHEARN LEE F ; DURACELL INC ; DURACELL INC A CORP OF DEL ; MALLORY CO INC P R ; MALLORY ET CO INC ; P R MALLORY AND CO INC ; P R MALLORY AND CO INC 3029 EAST WASHINGTON STRE ; MALLORY P R AND CO INC ; MALLORY P AND CO INC ; P R MALLORY AND CO INC 3029 EAST WASHINGTON STREET INDIANAPOLIS INDIANA 46206 E U A ; P R MALLORY AND CO INC (N D GES D STAATES DELAWARE) INDIANAPOLIS IND (V ST A) ; PR MALLORY AND CO INC

Inventor(s):(std)**:** ATHEARN LEE FRANK ; ATHEARN LEE F ; ATHEARN L F ; LEE FRANK ATHEARN

Inventor(s): L F ATHEARN ; FRANK ATHEARN LEE ; ATHEARN LEE FRANK READING MASS ; LF ATHEARN

Agent(s): AE MULFORD

International class (IPC 8-9): H01M2/02 H01M2/06 H01M6/16 H01M6/46 (Advanced/Invention); H01M2/02 H01M2/06 H01M6/16 H01M6/42 (Core/Invention)

International class (IPC 1-7): H01M1/00 H01M1/02 H01M2/02 H01M23/00 H01M37/00 H01M6/16

CPC: H01M2/0207 H01M6/42 H01M2/0275 H01M2/06 H01M6/16 H01M2/021 H01M6/46

European class: H01M2/02B4B H01M6/46 T01M2/02E12 T01M6/42 Y02E60/12

US class: 429/181 429/337

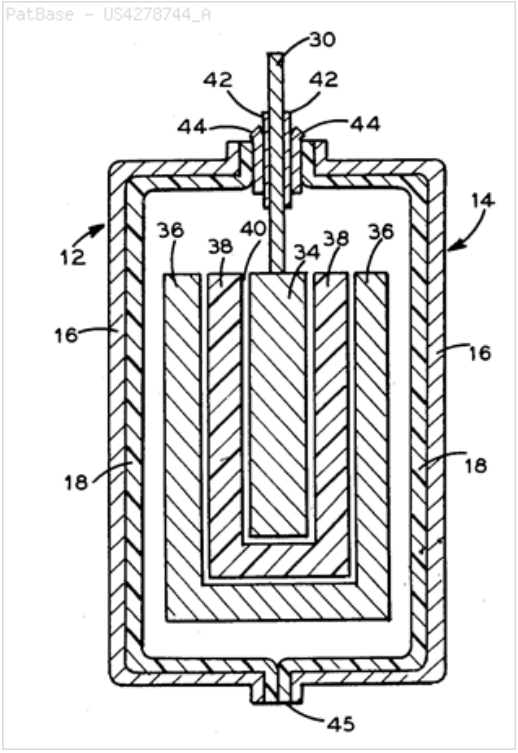
Classification Explorer

Cited documents: US395028 A, US3298871 A, US2995614 A, US2745894 A, US2686214 A, US2635128 A, US2632783 A, US2416079 A, US2389674 A,

Forward Citations: WO9612310, WO8603060, WO8504526, WO11119660, WO03061049, WO0128007, WO0054347, WO0041252, WO0041252, WO0036688, USRE43449, US9620826, US9484591, US9337455, US9269934, US8968901, US8956746, US8623547, US8557421, US8518578, US8313857, US8100211, US7410724, US6493209, US6224995, US6063520, US6040078, US5948562, US4678725, US4525439, US4522899, US4326016, US2012148904, US2011236732, US2011195285, US2011159327, US2011135994, US2011056758, US2010021802, US2009220853, US2009023062, US2006292436, US2006257732, US2003186117, US2003118903, US2003049527, JP60102872, JP58143052, JP50053625, JP2009152211, JP2008204963, JP2001176463, EP2581962, EP2017908, EP1844508, EP1844508, EP1291934, EP1291934, EP1043785, EP0938145, EP0938145, EP0296623, EP0296623, EP0160491, EP0160491, EP0081339, DE102012112063, CN104005045,

Abstract:
Source: US4278744A An expandable air-impermeable casing for an electrochemical cell comprised of complemental flexible casing sections of a material which provides a diffusion barrier to atmospheric contaminants. The casing provides an expandable compartment for containment of active cell materials, the cell terminal members sealably projecting through the mated casing sections. A battery shell or **container** is formed by **sealing** two side sheets along predetermined linear regions to form several pockets or chambers for accommodating, respectively, the ingredients and elements of an organic cell, and when the respective cell pockets are closed and **sealed**, the cells thus formed are then folded along intermediate fold lines into a-Z-or accordion pleated form, and then disposed in a protective **sealed** **box** as a battery.

PatBase - US4278744_A



383) Family number: 1041151 (US3802923A)

Title: **RESEALABLE** VENT **CLOSURE** FOR **SEALED** GALVANIC DRY CELL

Priority: US19710169909 19710809

Family:

Publication number	Publication date	Application number	Application date
AR193886 A1	19730531	AR19720243488	19720908
AT320768 B	19750225	AT19720006844	19720808
AU197245368 A1	19740214	AU19720045368	19720808
AU460950 B2	19750508	AU19720045368	19720808
BE787331 A	19730208		00000000
BE787331 A1	19730208	BE19720120770	19720808
BR7205330 A0	19730628	BR19720005330	19720808
CA995302 A1	19760817	CA19720147730	19720724
CH568660 A	19751031	CH19720011711	19720808
DE2238406 A1	19730301	DE19722238406	19720804
DE2238406 B2	19750403	DE19722238406	19720804
DE2238406 C3	19751113	DE19722238406	19720804
DK135072 B	19770228	DK19720003910	19720808
DK135072 C	19770815	DK19720003910	19720808
FR2150333 A1	19730406	FR19720028588	19720808
FR2150333 B1	19770401	FR19720028588	19720808
GB1396901 A	19750611	GB19720037030	19720808
HK16476 A	19760402	HK19760000164	19760325
IT961927 A	19731210	IT19720052069	19720808
KE2602 A	19760305	KE19760002602	19760223
MY7600055 A	19761231	MY19760000055	19761230
NL173000 B	19830616	NL19720010857	19720808
NL173000 C	19831116	NL19720010857	19720808
NL7210857 A	19730213	NL19720010857	19720808
OA4148 A	19791215	OA19720054656	19720809
SE403216 B	19780731	SE19720010300	19720808
SE403216 C	19781109	SE19720010300	19720808
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US3802923 A	19740409	US19710169909	19710809
ZA7205442 A	19730425	ZA19720005442	19720808

Probable Assignee: EVEREADY BATTERY CO INC A CORP OF DE

Assignee(s):(std)**:** UNION CARBIDE CORP ; UNION CARBIDE CORP US ; UNION GARBIDE CORP

Assignee(s): UNION CARBIDE TE NEW YORK CORP ; UNION CARBIDE CORP 270 PARK AVENUE NEW YORK N Y 10017 E U A ; UNION CARBIDE CORP NEW YORK N Y V ST A ; EVEREADY BATTERY CO INC ; EVEREADY BATTERY CO INC A CORP OF DE ; MORGAN GUARANTY TRUST CO ; MORGAN GUARANTY TRUST CO OF NEW YORK AND MORGAN BA ; MORGAN GUARANTY TRUST CO OF NEW YORK AND MORGAN BANK (DELAWARE) COLLATERAL (AGENTS) SEE RECORD FOR REMAINING ASSIGNEES AS ; MORGAN GUARANTY TRUST CO OF NEW YORK AND MORGAN BANK DELAWARE COLLATERAL AGENTS SEE RECORD FOR REMAINING ASSIGNEES AS ; SPANUR FRANK G

Inventor(s):(std)**:** SPANUR F ; SPANUR F G ; SPANUR FRANK GEORGE ; SPANUR FRANK G

Inventor(s): FG SPANUR ; SPANUR FRANK GEORGE PARMA HEIGHTS OHIO V ST A ; UNION CARBIDE CORP ; SPANUR FRANK GEORGE PARMA HEIGHTS OHIO VSTA ; SPANUR F US ; F G SPANUR ; FRANK GEORGE SPANUR

International class (IPC 8-9): H01M2/04 H01M2/12 (Advanced/Invention); H01M2/04 H01M2/12 (Core/Invention)

International class (IPC 1-7): F17C H01M1/00 H01M1/02 H01M1/06 H01M2/02 H01M2/12 H01M21/00 H01M6/08

CPC: H01M2/0417 H01M2/1229

European class: H01M2/04B2C H01M2/12C2 Y02E60/12

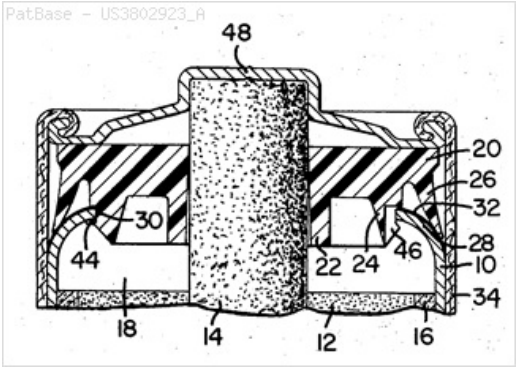
US class: 136/17.8 215/307 220/203.11 429/172 429/54

Classification Explorer

Forward Citations: WO8500469, US7931981, US6861174, US4684589, US4539269, US4481030, US4469764, US4442184, US4241845, US4146681, US4130140, US4124738, US4122241, US4079172, US4074022, US4063902, US3970478, US2006183020, US2006183019, US2003013014, GB2208031, GB2208031, FR2554640, FR2346863, FR2305862, EP1447600, EP0134982, EP0036091, AU568562,

Abstract:
Source: US3802923A A galvanic dry cell including a cylindrical **container** having an **open** end is provided with a **resealable** vent **closure** comprising a disc-like **cover** fitting over the **open** end of the **container** and including a resilient flapper valve member formed at the outer portion of the **cover**. The resilient flapper valve member extends from the **cover** towards and into contact with a valve seat surrounding the **open** end of the **container** and forms a normally fluid-tight **seal** therewith. The valve seat is formed by inwardly turning the peripheral edge portions of the cell **container** at the **open** end thereof. Any excessive gas pressure which develops inside the cell causes the resilient flapper valve member to deflect in a direction away from the valve seat momentarily breaking the **seal** and allowing gas to escape. 16 Claims, 5 Drawing Figures

PatBase - US3802923_A



384) Family number: 1116472 (US3789434A)

Title:	INCINERATOR TOILET
Priority:	US19710168577 19710803 US19730398196 19730917

Family:

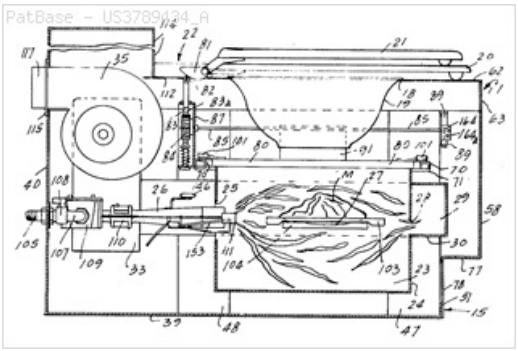
Publication number	Publication date	Application number	Application date
CA959603 A1	19741224	CA19720133783	19720202
DE2211714 A1	19730215	DE19722211714	19720310
DE7209284 U	19740404	DE19720009284U	19720310
US3789434 A	19740205	US19710168577	19710803
US3858251 A	19750107	US19730398196	19730917

Probable Assignee:	POLAR WARE CO
Assignee(s):(std)**:**	POLAR WARE CO
Assignee(s):	POLAR WARE CO SHEBOYGAN WIS V ST A ; POLAR WARE CO US ; POLAR WARE COMPANY ; SINGER ROY W ; TURK JOSEPH ; VIRNOCHE PAUL R ; VOLLRATH RICHARD J ; VOLLRATH WALTER J ; GERDES PAUL E
Inventor(s):(std)**:**	GERDES P ; SINGER R ; TURK J ; VIRNOCHE P ; VOLLRATH JUN WALTER J ; VOLLRATH R ; VOLLRATH W ; VOLLRATH WALTER J JR ; VOLLRATH WALTER J ; VOLLRATH RICHARD J ; VIRNOCHE PAUL R ; TURK JOSEPH ; SINGER ROY W ; GERDES PAUL E
Inventor(s):	VOLLRATH W US ; VOLLRATH R US ; VIRNOCHE P US ; TURK J US ; SINGER R US ; GERDES P US ; VOLLRATH JUN ; VIRNOCHE PAUL R NEWTON
International class (IPC 8-9):	A47K11/02 F23G5/50 (Advanced/Invention); A47K11/00 F23G5/50 (Core/Invention)
International class (IPC 1-7):	A47K11/02 F23G3/00 F23G3/02 F23G3/06
CPC:	Y02A50/454 A47K11/023 F23G5/50
European class:	A47K11/02B F23G5/50
US class:	4/111.3 4/111.4 4/111.5 4/13.1 4/131
Locarno class:	41/31

Classification Explorer

Cited documents:	US3694825 A, US3685719 A, US3320907 A, US3319588 A, US3286412 A, US3236405 A, US3092049 A, US3059807 A, US3059597 A, US2832534 A, US1632431 A, US1106732 A, US1092080 A,
Forward Citations:	WO9705815, WO09131468, WO09131468, US8966673, US4138331, US4122557, US4051561, US2011119816, KR101300530, GB2214729, AU711354,

Abstract:
Source: US3789434A A compact, low cost, efficient gas fired incinerator toilet has a chassis within which is suspended an insulated firebox with which is associated an afterburner passage leading to a mixing chamber upstream relative to an exhaust fan and duct. A toilet seat is mounted on a cabinet top separably carried by the top of the chassis for ready access into the **unit**. Various operating and safety structures and controls are provided.



385) Family number: 10840023 (US3719182A)

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Title: AUGMENTATION OF THE PRODUCTION OF ANTIBODIES IN ANIMALS AND HUMANS AND THE COLLECTION THEREOF

Priority: DE19782835307 19780811 US19710136476 19710422 US19770851744 19771115 US19730328048 19730130 US19770824182 19770812 US19730349330 19730409 US19810287032 19810727 US19790059497 19790723 US19820380960 19820521 US19920900897 19920618 US19900463694 19900111 US19910744947 19910814 US19910660710 19910225 US19910771729 19911004 US19950472671 19950607 US19940277706 19940720

Family:

Publication number	Publication date	Application number	Application date
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DE2416842 C2	19871008	DE19742416842	19740406
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US5571068 A	19961105	US19940277706	19940720
US5759147 A	19980602	US19950472671	19950607
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Probable Assignee: BAXTER INT INC

Assignee(s):(std)**:** BIO RESPONSE INC ; BAXTER TRAVENOL LAB ; BAXTER INT

Assignee(s): BAXTER INT INC ; BAXTER INT INC A CORP OF DE ; BAXTER INT INC N D GES D STAATES DELAWA ; BAXTER INTERNATIONAL INC ; BAIO RESUPONSU INC ; FENWAL INC ; BIO RESPONSE INC US ; BAXTER TRAVENOL LABOR INC ; BIO RESPONSE INC SCARBOROUGH N Y V ST A ; BAXTER TRAVENOL LABORATORIES INC ; FENWAL HOLDINGS INC ; BAXTER TRAVENOL LABORATORIES INC DEERFIELD ILL US ; BIO RESPONSE INC SCARBOROUGH N Y US ; BAXTER INTERNATIONAL INC N D GES D STAATES DELAWARE DEERFIELD ILL US ; BIO RESPONSE ; MORGAN STANLEY AND CO INC ; ROSE SAM

Inventor(s):(std)**:** BACEHOWSKI DAVID V ; CULLIS HERBERT M ; VANBAELEN ARMAND R ; VAN BAELEN ARMAND R ; ROSE SAM ; ROSE S ; HAABAATO EMU KARISU ; DEEBITSUDO BUI BASEHOUSUKII ; AAMONDO AARU FUANBEEREN ; SAMU ROOZU

Inventor(s): V BACEHOWSKI DAVID ; ROSE SAM EGGERTSVILLE N Y V ST A ; ROSE S US ; SAM ROSE ; ROSE SAM EGGERTSVILLE N Y ; ROSE SAM EGGERTSVILLE NY VSTA ; ROSE SAM EGGERTSVILLE NY ; DEEBITSUDO BUI BASEHOSUKII ; M CULLIS HERBERT ; R VANBAELEN ARMAND

International class (IPC 8-9): A61K35/14 A61K35/26 A61K35/28 A61K35/32 A61K35/34 A61K35/55 A61K39/00 A61M1/02 A61M1/36 B04B1/00 B04B5/04 C07K16/00 C07K16/06 C07K16/30 C12M1/00 C12N5/02 C12N5/06 C12P19/00 F04B43/10 F04B9/02 G01N33/48 (Advanced/Invention);
A61K35/14 A61K35/26 A61K35/28 A61K35/32 A61K35/34 A61K35/55 A61K39/00 A61M1/02 A61M1/36 C12N5/02 G01N33/48 (Advanced/Non-invention);
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A61M1/36 (Core/Non-invention);
A61K A61M (Subclass/Invention)

International class (IPC 1-7): A01N1/02 A61B19/00 A61K17/00 A61K23/00 A61K35/12 A61K35/14 A61K35/20 A61K35/26 A61K35/28 A61K35/32 A61K35/34 A61K35/55 A61K39/00 A61K39/395 A61K39/40 A61K39/42 A61M1/00 A61M1/02 A61M1/03 B04B1/00 B04B11/00 B04B5/00 B04B5/04 B04B7/08 B04B7/12 C07G7/00 C12B1/00 C12D9/00 C12K9/00 C12M1/10 C12N1/00 C12N5/00 C12N5/02 C12N5/06 F04B23/10 F04B43/00 F04B43/02 F04B43/12 F04B9/02 F16K7/07 G01F11/00 G01N1/14 G01N33/16 G01N33/54 G05D7/00

CPC: B04B2005/045 Y10S530/806 Y10S530/838 Y10S424/806 Y10S530/837 Y10S530/863 A61M1/362 A61M1/3679 A61M1/3693 C12M25/14 C12M27/10 C12M41/34 B04B5/0442 B04B1/00 B04B5/0428 B04B2005/0464 C07K16/30 F04B9/02 F04B43/10 C07K16/00 C07K16/06 A61M1/3696

European class: A61M1/36Z B04B1/00 B04B5/04B4 B04B5/04C C07K16/00 C07K16/06 C07K16/30 F04B43/10 F04B9/02 K61M1/36A30 K61M1/36P L04B5/04C1 L04B5/04C3

US class: 128/0.1R 128/1 128/1R 128/21.4R 128/898 195/1.8 383/127 424/140.1 424/537 424/806 424/85 435/1 435/2 435/240 435/241 435/391 435/394 435/397 435/401 494/18 494/45 530/364 530/387.1 530/389.1 530/389.4 530/389.5 530/389.6 530/389.7 530/412 530/413 530/427 530/806 530/837 530/838 530/863 604/28 604/5.01 604/8

Classification Explorer

Cited documents: US5217427 A, US5217426 A, US5006103 A, US4934995 A, US4734089 A, US4430082 A, US4430072 A, US4425112 A, US4419089 A, US4387848 A, US4356958 A, US4230263 A, US4120448 A, US4113173 A, US4109854 A, US4094461 A, US4091989 A, US4086924 A, US4069968 A, US4056224 A, US4010894 A, US4007871 A, US3987961 A, US3982691 A, US3957197 A, US3955755 A, US3862715 A, US3858796 A, US3825175 A, US3748101 A, US3742946 A, US3737096 A, US3724747 A, US3724727 A, US3719182 A, US3708110 A, US3703984 A, US3698626 A, US3672564 A, US3655123 A, US3652761 A, US3639559 A, US3591455 A, US3579441 A, US3528889 A, US3511238 A, US3496878 A, US3489145 A, US3133881 A, US3133831 A, US3129175 A, US3127342 A, US3096282 A, US3090549 A, US2952258 A, US2885145 A, US2876769 A, US2730299 A, US2719668 A, US2662687 A, US2321144 A, US2269716 A, US2261394 A, US2083899 A, US1954676 A, US1512469 A, US1472085 A, JP54011565 A2, JP47007898 A2, GB873494 A, GB812115 A, GB729169 A, GB373494 A, GB373493 A, GB1511819 A, GB1509667 A, GB1471204 A, GB1451859 A, GB1336965 A, FR2049713 A5, DE43693 A, DE2624154 A1, DE2031768 A1,

Forward Citations: WO9830247, WO08001992, WO0220165, USB302271, US9897589, US9895418, US9833794, US9789243, US9757721, US9733805, US9731148, US9719063, US9713810, US9701728, US9649579, US9642956, US9556243, US9533090, US9443633, US9364600, US9327296, US9302042, US9248446, US9248227, US9239276, US9238097, US9138664, US9114334, US9095665, US9079194, US9011800, US8992862, US8950586, US8834402, US8808978, US8808551, US8808217, US8801586, US8783470, US8767917, US8702637, US8647289, US8628489, US8603346, US8596470, US8591391, US8567609, US8501918, US8497117, US8454548, US8442287, US8337711, US8328024, US8313954, US8298128, US8232535, US8229068, US8197430, US8187477, US8187475, US8163184, US8133490, US8133389, US8119013, US8105495, US8096422, US8062534, US8048321, US8012077, US7998052, US7992725, US7987995, US7957507, US7918350, US7914689, US7914477, US7897054, US7866485, US7854717, US7850634, US7845499, US7839972, US7837884, US7832566, US7824559, US7806276, US7789245, US7780860, US7773788, US7708889, US7708152, US7695423, US7643661, US7639854, US7639853, US7609809, US7585461, US7574251, US7567694, US7549956, US7531098, US7503889, US7497944, US7479123, US7476209, US7473216, US7452322, US7374678, US7354415, US7347948, US7332125, US7306741, US7297272, US7279107, US7235041, US7211037, US7166231, US7115205, US7108672, US7097774, US7094197, US7094196, US7037428, US7029430, US6951612, US6945948, US6902539, US6899666, US6890728, US6890291, US6887371, US6878105, US6866846, US6860846, US6849039, US6827863, US6800054, US6796515, US6790371, US6790195, US6780333, US6773413, US6773389, US6740239, US6736768, US6730055, US6691937, US6689042, US6659373, US6656105, US6641552, US6632191, US6613009, US6612975, US6610002, US6605028, US6602502, US6602179, US6596181, US6589155, US6589153, US6582349, US6579219, US6558307, US6524231, US6514189, US6511411, US6500107, US6497674, US6409696, US6379322, US6361518, US6354986, US6334842, US6322488, US6315707, US6296602, US6277060, US6234989, US6228017, US6214338, US6200287, US6196987, US6179801, US6146883, US6129656, US6102883, US6080383, US6074335, US6071423, US6071421, US6053856, US6048721, US6039711, US6027657, US6019742, US6007725, US6007509, US6000242, US5993370, US5980760, US5971948, US5961846, US5961842, US5954626, US5941842, US5921950, US5919154, US5904645, US5885239, US5879881, US5879280, US5876321, US5866417, US5849579, US5849203, US5837150, US5807492, US5804079, US5795317, US5792372, US5792038, US5779660, US5759147, US5756097, US5750039, US5750025, US5738644, US5733253, US5728060, US5722946, US5720716, US5704889, US5704888, US5702357, US5693232, US5690835, US5690602, US5676644, US5656163, US5653887, US5643193, US5641414, US5632893, US5628915, US5607830, US5599688, US5591636, US5585007, US5573678, US5571068, US5551942, US5549834, US5529691, US5525218, US5494578, US5445593, US5427695, US5418130, US5370802, US5362291, US5360542, US5322620, US5316667, US5316666, US5217427, US5217426, US5160310, US5104526, US5089385, US5078671, US5076911, US5028541, US4940543, US4936820, US4919664, US4834890, US4795419, US4743227, US4721096, US4718888, US4692136, US4684521, US4683889, US4663289, US4613322, US4612007, US4608342, US4551435, US4540401, US4531932, US4512763, US4469681, US4464166, US4329986, US4283276, US4127648, US4059108, US4033344, US3964467, US3929130, US2011237418, US2011201986, US2011143439, US2011112351, US2010330665, US2010285044, US2010069215, US2009298665, US2009294383, US2009263457, US2009259164, US2009259163, US2009259162, US2009227750, US2009127206, US2009041200, US2008200859, US2008173773, US2008171646, US2008145333, US2008075690, US2008057060, US2007213191, US2007201613, US2007195929, US2007195922, US2007118063, US2007076846, US2007065514, US2007043286, US2007041497, US2007041496, US2007041495, US2007012623, US2006285639, US2006270542, US2006240964, US2006226086, US2006226057, US2006224099, US2006219644, US2006217651, US2006193441, US2006155236, US2005244371, US2005143684, US2005098507, US2005082237, US2005049539, US2004254515, US2004249332, US2004245189, US2004230152, US2004219058, US2004199098, US2004185998, US2004164032, US2004147865, US2004135013, US2004124157, US2004082459, US2004082458, US2004079707, US2004058794, US2004055937, US2004009862, US2003211927, US2003203802, US2003199803, US2003173274, US2003125182, US2003102272, US2003054934, US2002182664, US2002119147, US2002077241, TWI309174, KR100767448, JP62016840, JP55072860, JP2043965, GB2181371, GB2181371, EP2680863, EP2111883, EP2100631, EP2100630, EP1671665, EP1491259, EP1186346, EP0893603, EP0893603, EP0096217, EP0096217, EP0068042, EP0061781, EP0035398, EP0035397, EP0032927, EP0032927, DE2532883, DE2416842, CN103191013, CN103191013,

Abstract:
Source: US3719182A ABSTRACT OF THE DISCLOSURE
It has been found that very large production of antibodies can be achieved by removing specific feedback regulatory antibodies by means of a lymphoresis per- 15 formed under special conditions in a patient or subject (e.g., an animal or human) with induced anatomical and physiological changes. The subject is first given antigen administration then, preferably, but not mandatorily, is splenectomized. A 20 thoracic duct fistula is next performed. The central venous system pressure is then preferably raised so that it is above the atmospheric pressure of the thoracic duct. In this manner, substantially all the lympth fluid is allowed to flow out of the thoracic duct from the fistula (through an 25 indwelling catheter) for a prolonged period of time. The lymph is separated into cells and lymph fluid. The cells are returned to the subject intravenously. The subject must be given replacement fluid, which can be of several kinds, but all lacking the specific antibody. By virtue of the above procedure, the plasma and extracellular fluid of the subject is continuously depleted of feedback antibody because the antibody is continuously removed prior to its reaching the blood stream. Because of this lack of antibody, in the presence of antigen admin- 35 istration, it is found that the antibody production in the lymphoid tissue and therefore its content in the lymph fluid is enormous and ever-increases. The tremendous increase in antibody production appears to be several orders of magnitude greater than other modes of antibody production and therefore appears to have very substantial utility in the fields of biology, chemistry and veterinary and clinical medicine.

PatBase - US3719182_A

March 6, 1973 S. ROSE 3,719,182

AUGMENTATION OF THE PRODUCTION OF ANTIBODIES IN ANIMALS AND HUMANS AND THE COLLECTION THEREOF

Filed April 22, 1971 2 Sheets-Sheet 1

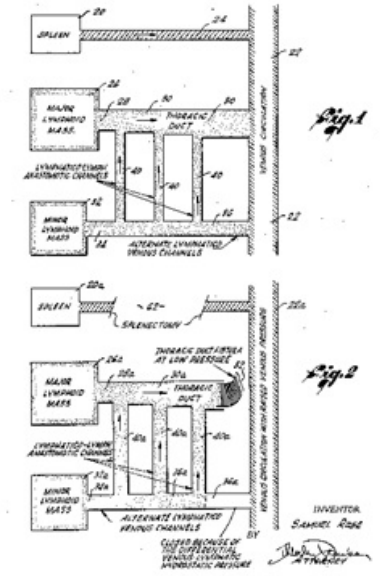


Fig. 1

Fig. 2

INVENTOR.
SAMUEL ROSE
BY
ATTORNEY

386) Family number: 1071360 (US3776419A)

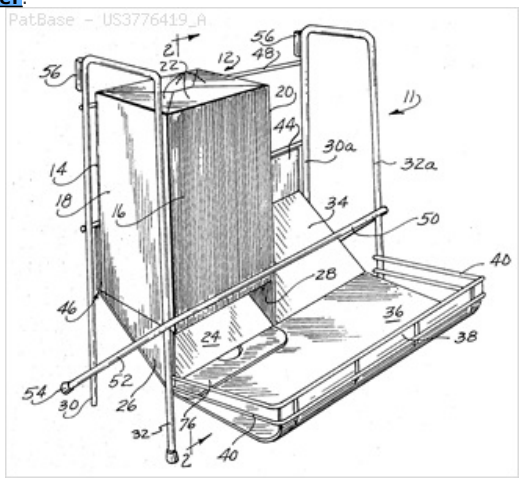
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Priority:	US19710181614 19710917

Family:

Publication number	Publication date	Application number	Application date
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CA966813 A1	19750429	CA19720151392	19720911
DE2245351 A1	19730322	DE19722245351	19720915
GB1376070 A	19741204	GB19720040178	19720830
US3776419 A	19731204	US19710181614	19710917

Probable Assignee:	KRAFTO CORP
Assignee(s):(std):	KRAFTO CORP ; KRAFTCO CORP
Assignee(s):	KRAFTCO CORP GLENVIEW ILL V ST A ; KRAFTO CORP US ; WILLIAMS JACK L ; ZINKGRAF BERNHARD A
Inventor(s):(std):	WILLIAMS J ; WILLIAMS JACK L ; WILLIAMS JACK LEROY ; ZINKAGRAF BERNHARD AUSTIN ; ZINKGRAF B ; ZINKGRAF BERNHARD A ; ZINKGRAF BERNHARD AUSTIN
Inventor(s):	ZINKGRAF BERNHARD AUSTIN PROSPECT HEIGHTS ; ZINKGRAF B US ; WILLIAMS JACK LEROY PALATINE ; WILLIAMS J US ; BERNHARD AUSTIN ZINKAGRAF ; JACK LEROY WILLIAMS
International class (IPC 8-9):	A47F1/08 A47F3/024 B65H1/06 (Advanced/Invention); A47F1/00 A47F3/00 B65H1/06 (Core/Invention)
International class (IPC 1-7):	A47F1/08 A47F3/024 B65D83/00 B65H1/06
CPC:	A47F1/082
European class:	A47F1/08B
US class:	206/738 221/197 221/311 312/35
Classification Explorer	
Cited documents:	US3002651 A, US2178162 A, US1999021 A, US1859871 A, US1753957 A, US1694897 A, FR783525 A, BE513791 A,
Forward Citations:	USD699487, US9818070, US7588168, US7159726, US6581787, US6494328, US6250546, US5456381, US5390821, US5361937, US5285925, US4971222, US4779745, US4318577, US4243145, US4146278, US4116328, US2014135966, US2007289987, US2007012714, US2003010667, EP1784717,

Abstract:
Source: US3776419A Apparatus for **dispensing** articles which includes a **container** and a rack to hold the **container** in an inverted position. The rack cooperates with the **container** to support the **container** in a predetermined manner so as to allow articles to move from the **container** through an **opening** in the **container**.



387) Family number: 1523859 (US3793974A)

Title: MARINE TRANSPORT

Priority: US19690794938 19690129 US19710187537 19711007 US19760678079 19760419 US19740439375 19740204 US19760649645 19760116

Family:

Publication number	Publication date	Application number	Application date
CA1069387 A1	19800108	CA19770276435	19770419
CA975705 A1	19751007	CA19720152408	19720925
DE2248381 A1	19730412	DE19722248381	19721003
DE2248381 C2	19830331	DE19722248381	19721003
GB1402870 A	19750813	GB19740017627	19721006
GB1545138 A	19790502	GB19770016094	19770419
JP48046080 A2	19730630	JP19720099929	19721006
JP56099888 A2	19810811	JP19800174790	19801212
JP58000481 A2	19830105	JP19820043046	19820319
US3793974 A	19740226	US19710187537	19711007
US3934532 A	19760127	US19740439375	19740204
US4072120 A	19780207	US19760649645	19760116
US4085695 A	19780425	US19760678079	19760419

Probable Assignee: BYLO J J

Assignee(s):(std)**:** BYLO JOHN J ; BYLO JOHN JOSEPH ; BYLO J ; BYLO J J

Assignee(s): BYLO J US ; BYLO JOHN JOSEPH LOS ANGELES CALIF US ; JIYON JIYOUZEFU BAIRO

Inventor(s):(std)**:** BYLO J ; BYLO JOHN J ; BYLO JOHN JOSEPH ; JIYON JIYOUZEFU BAIRO

Inventor(s): JOSEPH BYLO JOHN ; BYLO JOHN JOSEPH LOS ANGELES CALIF ; BYLO JOHN JOSEPH LOS ANGELES CALIF US ; BYLO J US

International class (IPC 8-9): B63B25/00 B63B3/08 B63B35/00 B63B35/40 B63B35/44 E02B17/00 (Advanced/Invention); B63B25/00 B63B3/00 B63B35/00 B63B35/44 E02B17/00 (Core/Invention)

International class (IPC 1-7): B63B25/00 B63B27/00 B63B3/08 B63B35/40 B63B35/44 B63C1/12 E02B17/00

CPC: B63B3/08 B63B25/004 B63B25/002 B63B35/003 E02B17/00

European class: B63B25/00B B63B25/00B2 B63B3/08 B63B35/00L E02B17/00

US class: 114/260 114/264 114/43.5 114/72 414/140.6 414/143.2

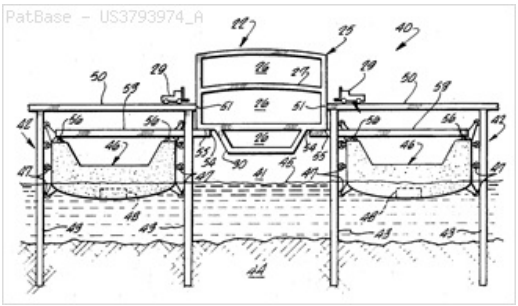
Classification Explorer

Cited documents: US3727414 A, US3587505 A, US3557742 A, US3556036 A, US3508514 A, US3417721 A, US3399792 A, US3380422 A, US3349742 A, US3191568 A, US3139197 A, US2924947 A, US2587505 A, US1107741 A, US1001170 A, GB1022374 A, FR1272302 A,

Forward Citations: WO9717496, WO9221591, WO9219490, WO9214667, WO16101957, WO0234617, US9067643, US8677917, US8540023, US7685957, US7487735, US7436324, US7278364, US7231880, US7219613, US7191724, US6983567, US6276876, US6016760, US5460208, US5365980, US5140924, US4746245, US4478155, US4309953, US3934530, US2013025522, US2011126755, US2011011584, US2010031867, US2008190342, US2007216541, US2006075949, US2006075948, US2004182298, US2004149196, US2004149194, US2002165746, TWI342852, TR26441, JP54009885, JP2008213835, GB2306920, GB2172635, GB2172635, EP0302038, EP0056231, DE4229670,

Abstract:

Source: US3793974A An integrated marine transport system for joint or separate commercial and military uses in which a plurality of cargo **containers**, each sized to define the entire cargo carrying space of a vessel, are each separably mated with cooperatively configured vessels provided for moving the **containers** from port to port. The system also includes dock facilities configured to mate with the cargo **containers** and to receive and to discharge the **containers** directly from and to the vessels. The system also includes in-port vessels for transferring the **containers** from the port-to-port vessels to the docks. Also described is a novel docking arrangement useful in conjunction with the vessels and the cargo **containers** to provide port and cargo handling facilities in undeveloped areas.



388) Family number: 7301958 (US3730394A)

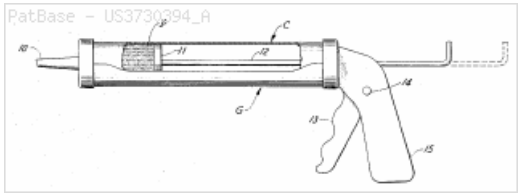
Title:	PUTTY MIXING **CONTAINER** FOR CAULKING GUN-TYPE **DISPENSER**
Priority:	US19700076087 19700928

Family:

Publication number	Publication date	Application number	Application date
US3730394 A	19730501	US19700076087	19700928

Probable Assignee:	WOODSON K
Assignee(s):(std):	WOODSON K
Assignee(s):	WOODSON K US
Inventor(s):(std):	WOODSON K
Inventor(s):	WOODSON K US
International class (IPC 8-9):	B01F13/00 B01F15/02 (Advanced/Invention); B01F15/00 (Advanced/Non-invention)
International class (IPC 1-7):	B29B1/04 B29B1/06
CPC:	B01F13/002 B01F13/0023 B01F15/00506 B01F15/0205 B01F15/0215 B01F15/0226
European class:	B01F13/00K2B B01F13/00K2B4 B01F15/02B20H B01F15/02B6 B01F15/02B6R L01F15/00L8C
US class:	222/13.7 222/137 222/235 222/326 366/130 366/279
Classification Explorer	
Cited documents:	US3217946 A, US2819738 A, US2801775 A, US2125614 A, GB880558 A, CA650964 A,
Forward Citations:	US9616454, US9511923, US9067711, US9039557, US8875948, US8857672, US8834014, US8740021, US8528785, US7793800, US7141227, US6415955, US6099160, US6079871, US5501371, US5405056, US5082147, US4735509, US4325652, US2010206904, US2010135108, US2009266843, US2006246187, US2006089655, US2005031517, EP2977024, CN101804392, CN101804392,

Abstract:
Source: US3730394A A putty mixing **container** of the disposable type in which an epoxy putty and a catalyst are separated from one another on opposite sides of a mixer by a removable barrier. The putty and catalyst are mixed by rotation of the mixer after removal of the barrier. The mixer is removable from the **container** to allow **dispensing** of the mixed material or the mixer is of deformable construction to enable **dispensing** of the mixed material.



389) Family number: 7318057 (US3732909A)

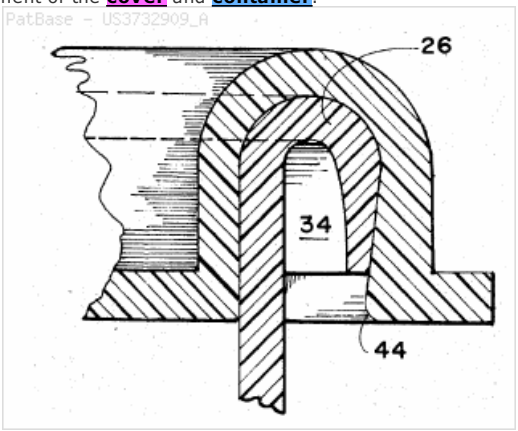
Title:	THERMPOLASTIC **CONTAINER** AND **COVER**
Priority:	US19710115342 19710216

Family:

Publication number	Publication date	Application number	Application date
US3732909 A	19730515	US19710115342	19710216

Probable Assignee:	FULLER BRUSH CO
Assignee(s):(std):	FULLER BRUSH CO
Assignee(s):	FULLER BRUSH CO US
Inventor(s):(std):	ROOKE R ; DAVIS J
Inventor(s):	DAVIS J US ; ROOKE R US
International class (IPC 8-9):	B65D43/02 (Advanced/Invention); B65D43/02 (Core/Invention)
International class (IPC 1-7):	B65D43/06
CPC:	B65D43/0218 B65D2543/00092 B65D2543/00296 B65D2543/00509 B65D2543/00537 B65D2543/00555
European class:	B65D43/02S5B L65D543/00Y1F2C L65D543/00Y1M6 L65D543/00Y8D1C L65D543/00Y8D3 L65D543/00Y8D5
US class:	150/0.5 220/792 220/793
Classification Explorer	
Cited documents:	US3360119 A, US3128903 A, US2802499 A, GB190413750 A,
Forward Citations:	USD486358, US9764863, US9340330, US9073681, US7703621, US7658298, US6892897, US6789393, US6431393, US6164484, US5709314, US5240138, US5185008, US5152417, US5065888, US4936482, US4880131, US4809868, US4786285, US4765506, US3861433, US2011240641, US2007235457, US2007045315, EP0461691, EP0291235, AU601526,

Abstract:
Source: US3732909A A **container** and a hermetically **sealable** and removable **cover** therefor each formed of locally deformable thermoplastic material and each having depending skirts. The **container** skirt forms part of a rim flange with a semi-circular upper portion and the skirt is of decreasing thickness viewed downwardly. The **closure** skirt forms an outer wall of a downwardly **open** groove for receiving the **container** rim flange and which has a complementary semi-circular top groove wall. The **cover** skirt increases gradually in thickness viewed downwardly and serves to flex the **container** skirt inwardly on engagement of the **cover** whereby to provide a resilient gripping engagement of the **cover** and **container**.



390) Family number: 30389202 (US3890448A)

Title: HEATABLE **PACKAGE** OF FOOD

Priority: JP19710077539 19711005 JP19720010951 19720201 JP19720012752U 19720201 JP19720030047 19720325

Family:

Publication number	Publication date	Application number	Application date
FR2155233 A5	19730518	FR19720029479	19720817
JP1017039 C3	19801028	JP19720010951	19720201
JP48042883 A2	19730621	JP19710077539	19711005
JP48081693 A2	19731101	JP19720010951	19720201
JP48088375 U1	19731025	JP19720012752U	19720201
JP48097975 A2	19731213	JP19720030047	19720325
JP50021504 B4	19750723	JP19720030047	19720325
JP51022519 B4	19760710	JP19710077539	19711005
JP51039728 Y2	19760929	JP19720012752U	19720201
JP52004615 B4	19770205	JP19720010951	19720201
JP808331 C3	19760315	JP19720030047	19720325
US3890448 A	19750617	US19720281407	19720817

Probable Assignee: TOYO SEIKAN KAISHA LTD

Assignee(s):(std)**:** TOYO SEIKAN KAISHA LTD

Assignee(s): TOYO SEIKAN KAISHA LIMITED

Inventor(s):(std)**:** ITO SENJI

International class (IPC 8-9): A23L3/00 A47J27/00 A47J47/02 B32B15/04 B32B15/08 B32B15/088 B65D53/00 B65D65/00 B65D65/40 B65D75/32 B65D77/02 B65D77/20 B65D77/22 B65D8/22 B65D81/00 B65D81/34 C09J5/00 C09J5/10 (Advanced/Invention);
B65B25/22 (Advanced/Non-invention);
A23L3/00 A47J27/00 A47J47/00 B32B15/04 B32B15/08 B65D53/00 B65D65/00 B65D65/40 B65D75/28 B65D77/00 B65D77/10 B65D77/22 B65D8/04 B65D81/00 B65D81/34 C09J5/00 C09J5/10 (Core/Invention);
B65B25/00 (Core/Non-invention)

International class (IPC 1-7): A23L3/00 A47J27/00 A47J47/02 B21D19/00 B21D39/00 B32B15/08 B65B25/22 B65D17/16 B65D3/14 B65D65/00 B65D7/00 B65D77/02 B65D81/00 B65D81/34 C09J5/02

CPC: Y10S229/903 B65D81/3492 B65D75/32 B65D81/3415 B65D81/343

European class: B65D75/32 B65D81/34B B65D81/34C B65D81/34T

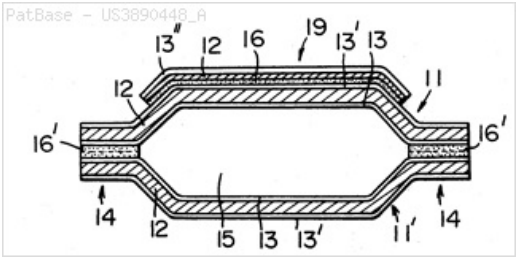
US class: 220/62.13 220/62.22 229/5.84 229/903 426/106 426/126 426/131 426/412 528/183 528/208 528/229 528/26 528/28 528/350 528/351 528/352 528/353 528/38 528/41

Classification Explorer

Cited documents: US3803103 A, US3773589 A, US3666723 A, US3663239 A, US3642720 A, US3615706 A, US3597392 A, US3550806 A, US3534003 A, US3532673 A, US3531300 A, US3469998 A, US3179634 A, JP46000102 U1, JP39011936 Y1,

Forward Citations: US9114925, US9056963, US8028502, US7632370, US6254932, US6238736, US6179880, US6086634, US6036727, US5997586, US5972041, US5455089, US5343672, US5199595, US5093466, US4978056, US4925050, US4848931, US4685273, US4542029, US4478858, US4391833, US4291085, US4109818, US4073949, US3997677, US2015122150, US2013139721, US2011256294, US2010218462, US2009279925, US2009226581, US2007290027, US2005252600, JP57175554, JP56041140, JP51010103, JP5037188, FR2802901, FR2658797, FR2451182, FR2318082, EP0031101, DE4030646, DE2756072,

Abstract:
Source: US3890448A A heatable **package** of food comprising a food product encased in a **packaging** **container**, said **packaging** **container** being composed of at least one sheet material consisting of a metal sheet and having at least one the inner surface thereof a protective coating layer of a heat resistant resin selected from the group consisting of polyimide resins and polyimidazole resins, said sheet material having a thickness of 5 to 500 microns.



391) Family number: 7326198 (US3734388A)

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Title: **OPENING** MEANS FOR TETRAHEDRAL **CONTAINER**

Priority: US19720232751 19720308 US19720289615 19720915

Family:

Publication number	Publication date	Application number	Application date
US3734388 A	19730522	US19720232751	19720308
US3791570 A	19740212	US19720289615	19720915

Probable Assignee: HOPKINS A

Assignee(s):(std)**:** HOPKINS A

Assignee(s): HOPKINS A US

Inventor(s):(std)**:** HOPKINS A

Inventor(s): HOPKINS A US

International class (IPC 8-9): B65D75/50 B65D75/58 (Advanced/Invention); B65D75/00 B65D75/52 (Core/Invention)

International class (IPC 1-7): B65D17/00 B65D33/16 B65D75/50 B65D83/00

CPC: B65D75/50 B65D75/5855

European class: B65D75/50 B65D75/58F

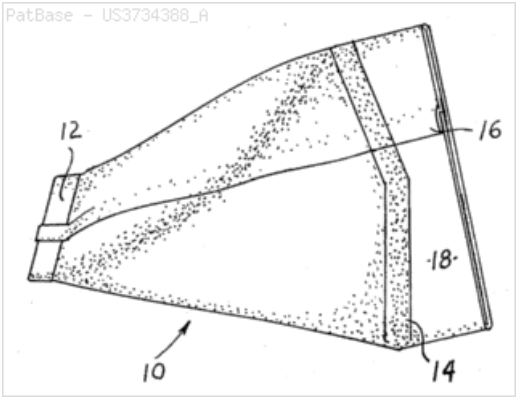
US class: 156/461 206/522 206/525 222/107 229/103.1 229/116 229/7 383/210

Classification Explorer

Cited documents: US3577301 A, US3482491 A, US3458111 A, US3404988 A, US3244274 A, US3083876 A, US3051368 A, US3032251 A, US2189174 A,

Forward Citations: WO9014283, WO04078421, WO04078421, WO0001592, USD761121, USD701016, USD644101, US8939643, US8695869, US8403561, US7314439, US7169102, US6485177, US6435374, US6375001, US5885673, US5884758, US5366296, US5353985, US4928852, US4576316, US4480751, US4301927, US3970240, US2012273560, US2011315751, US2010200645, US2007099784, US2005153822, US2004188460, ITTO20111026, GB2366277, FR2543918, EP2805898, EP2805898, EP2592017, EP0968931, DE102010003399,

Abstract:
Source: US3734388A A tetrahedral shaped **container** is provided with a pair of **tabs** at one end. By pulling apart the **tabs**, an **opening** is formed at one end. The end **seal** at the **tab** end of the **container** is critically shaped so as to provide for the combination of ease of **opening**, strong **seal** which will not prematurely **open** or leak, and which will not distort the configuration of the **container**. The **seal** shape must deviate from a straight line normal to the longitudinal axis of the **container** by an extent great enough to permit the **opening** force to be applied to only a small region of the **seal**, but by an extent small enough to minimize distorts in the **container**.



392) Family number: 29803635 (US3736736A)

Title: BALING ATTACHMENT FOR LAWN MOWERS

Priority: US19720231890 19720306

Family:

Publication number	Publication date	Application number	Application date
CA952321 A1	19740806	CA19720156530	19721115
DE2307945 A1	19731004	DE19732307945	19730217
DE2307945 B2	19760513	DE19732307945	19730217
DE2307945 C3	19761230	DE19732307945	19730217
FR2174859 A1	19731019	FR19730006470	19730223
FR2174859 B1	19770107	FR19730006470	19730223
GB1396475 A	19750604	GB19730010872	19730306
JP48103339 A2	19731225	JP19720122596	19721208
NL7302676 A	19730910	NL19730002676	19730227
US3736736 A	19730605	US19720231890	19720306

Probable Assignee: DEERE AND CO

Assignee(s):(std)**:** DEERE AND CO ; DEERE AND CO MOLINE ILL V ST A NIEDERLASSUNG D

Assignee(s): DEERE AND CO US ; DEERE AND COMPANY ; DEERE AND CY ; DEERE CO ; MYERS HERBERT A

Inventor(s):(std)**:** MYERS HERBERT ARTHUR COAL VALLEY ILL ; MYERS HERBERT ARTHUR ; MYERS HERBERT A ; MYERS H

Inventor(s): ARTHUR MYERS HERBERT ; MYERS H US

International class (IPC 8-9): A01D34/63 A01D43/063 A01F15/00 (Advanced/Invention);
A01D34/63 (Advanced/Non-invention);
A01D34/63 A01D43/00 A01F15/00 (Core/Invention);
A01D34/63 (Core/Non-invention)

International class (IPC 1-7): A01D35/22 A01D35/26

CPC: A01D34/63 A01D43/0633 A01D2101/00 A01F15/00

European class: A01D43/063D A01F15/00 K01D101/00 K01D34/63

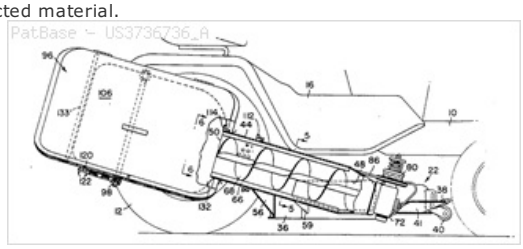
US class: 15/78 15/83 56/14.5 56/16.6 56/202

Classification Explorer

Cited documents: US3641754 A, US3543490 A, US3483684 A, US3461654 A, US3229320 A, US3222853 A,

Forward Citations: WO8201115, WO04095910, USRE40761, US9872434, US9446866, US8646141, US8640294, US8549689, US8393039, US8359694, US7431113, US6898925, US6820542, US6263649, US5343679, US4986063, US4986062, US4693063, US4665684, US4614080, US4597252, US4487007, US4476668, US4443997, US4262475, US4156337, US4103477, US4069649, US3791118, US2016198630, US2014230961, US2009241275, US2009235472, US2007022725, JP54166463, JP54166461, JP53017058, ITMO20090148, GB2240022, GB2167633, GB2132063, FR2722056, FR2514987, EP1656825, EP1410708, EP1410708, EP0364913, EP0292969, EP0078217, DE4123175, DE102008024105,

Abstract:
Source: US3736736A A lawn and garden type tractor has a belly-mounted rotary lawn mower with a side discharge **opening** communicating with the forward end of a generally fore-and-aft tubular auger housing. An auger is journaled in the housing and is rotated by a drive connected to and driven by the mower drive, so that it moves material discharged by the mower **unit** through the rearward **open** end of the auger housing and into a relatively large enclosure supported alongside the rear wheel of the tractor. The material can be compressed directly into the enclosure, which can be dumped, or it can be compressed into a plastic **bag** or liner mounted within the enclosure with its **open** end over the outlet end of the auger housing, the **bags**, or liners being removable from the enclosure when they are filled with the compacted material.



393) Family number: 7348702 (US3738567A)

Title: DRAW BAND **CLOSURE** **BAG**

Priority: US19700003761 19700119 US19710104414 19710106 US19720273954 19720721

Family:

Publication number	Publication date	Application number	Application date
US3738567 A	19730612	US19700003761	19700119
US3738568 A	19730612	US19710104414	19710106
US3772968 A	19731120	US19720273954	19720721

Probable Assignee: BAGCRAFT CORP

Assignee(s):(std)**:** BAGCRAFT CORP

Assignee(s): BAGCRAFT CORP US ; BAGCRAFT OF AMERICA A CORP OF DE CORP ; CONTINENTAL ILLINOIS NATIONAL BANK TRUST CO ; CONTINENTAL ILLINOIS NATIONAL BANK TRUST CO OF CHICAGO 231 SOUTH LASALLE STREET CHICAGO ILLINOIS 60697

Inventor(s):(std)**:** RUDA R

Inventor(s): RUDA R US

International class (IPC 8-9): B65D33/28 (Advanced/Invention); B65D33/16 (Core/Invention)

International class (IPC 1-7): B31B1/86 B65D33/16 B65D33/28

CPC: B65D33/28

European class: B65D33/28

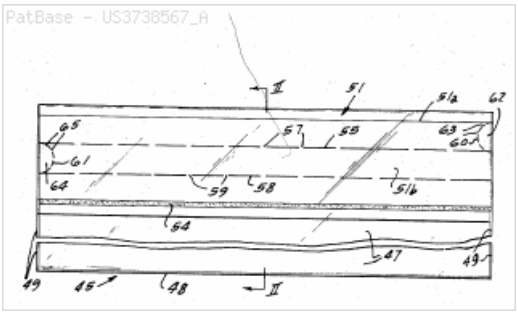
US class: 206/554 229/6.2 229/62 383/203 383/67 383/75 493/224 493/225

Classification Explorer

Cited documents: US3552639 A, US3547341 A, US3512456 A, US3460741 A, US3403840 A, US3283672 A, US3228584 A, US3196757 A, US3029853 A, US3013597 A, US3010640 A, US2697465 A, SE189062 C1,

Forward Citations: WO9607598, WO8804635, WO15188241, WO13116264, WO13112737, WO11006505, WO03035500, WO03022698, USRE40284, USRE39505, USD788582, USD787319, USD784127, USD781702, USD778719, USD777026, USD772069, USD768479, USD768355, USD766082, USD764914, USD761651, USD756219, USD754534, USD753996, USD753995, USD750477, USD748471, USD747646, USD747202, USD747195, USD747189, USD746673, USD743808, USD740114, USD739232, USD734144, USD733549, USD730725, USD729635, USD726535, USD725467, USD715643, USD619807, USD611707, US9850036, US9745104, US9637278, US9624004, US9604760, US9555932, US9550610, US9469443, US9393757, US9387957, US9387955, US9381718, US9381697, US9365324, US9315319, US9302823, US9162786, US9050783, US8702308, US8628243, US8602244, US8602242, US8528765, US8523439, US8444319, US8348511, US8157444, US7988681, US7758243, US7004628, US6602174, US6402377, US6279298, US6148588, US6071011, US6059458, US5716137, US5617711, US5556658, US5433335, US5346311, US5265962, US5174657, US5161895, US5112138, US5057065, US5033868, US4938607, US4930905, US4881933, US4881931, US4880316, US4877336, US4850946, US4832507, US4813794, US4813793, US4813792, US4792241, US4786189, US4778283, US4713839, US4624654, US4623323, US4597750, US4573203, US4558463, US4493683, US3982687, US3859895, US2015344190, US2015246752, US2015190198, US2015016754, US2015010251, US2013301958, US2013243982, US2013202229, US2013188891, US2013089278, US2013051708, US2012269466, US2012269465, US2012163738, US2012063704, US2012051671, US2011229061, US2011075952, US2010247002, US2010234819, US2010140129, US2010111452, US2010046860, US2009245697, US2009232422, US2009196535, US2009175564, US2009074332, US2007108247, US2007065052, US2005070413, ITTV20130215, FR3028503, FR2615445, EP2460736, EP2275356, EP2067711, EP0700835, DE4133095, DE4133095, DE3643503, DE10144708, DE10144708, AU2012205146,

Abstract:
Source: US3738567A A **bag** made from pliable sheet material has about its mouth a flat, folded, tubular lip tunnel with a flat draw band therein comprising only flexible sheet material. The draw band is adapted to be grasped at a tunnel **opening** to pull the draw band partially through the **opening** and to draw the tunnel area into puckered mouth-closing relation on that portion of the draw band which remains in the puckered area.



394) Family number: 2454224 (US3854583A)

Title: NESTABLE FABRICATED THERMOPLASTIC **CONTAINER** AND METHOD OF FABRICATION SAME

Priority:

AU19740068169 19740422
CA19740198025 19740424
MX19740140473 19740425
DE19742462343 19740425
NL19740005454 19740423
CA19770282601 19770713
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US19760683466 19760505
US19760683746 19760506
US19710211259 19711223
US19740479421 19740614
NL19740005454 19740423
US19730354305 19730425
US19760683893 19760506

Family:

Publication number	Publication date	Application number	Application date
AU197245778 A1	19740228	AU19720045778	19720821
AU197468169 A1	19751023	AU19740068169	19740422
AU471127 B2	19760408	AU19720045778	19720821
BE814169 A	19741025	BE19740143595	19740425
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NL170711 B	19820716	NL19740005454	19740423
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NO148361 B	19830620	NO19720004783	19721227
NO148361 C	19830928	NO19720004783	19721227
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US4197948 A	19800415	US19760683746	19760506
ZA7208976 A	19730926	ZA19720008976	19721220

Probable Assignee: OWENS ILLINOIS PLASTIC PRODUCTS INC A CORP OF DE

Assignee(s):(std)**:** OWENS ILLINOIS INC ; AWENS ILLINOIS INC

Assignee(s): BANKERS TRUST CO ; BANKERS TRUST CO COLLATERAL AGENT AS ; DOHERTY THOMAS E ; OWENS ILLINOIS ; AMBERG STEPHEN W ; OWENS ILLINOIS PLASTIC PRODUCTS INC ; SWEETHEART CUP CO INC ; OWENS ILLINOIS INC US ; OWENS ILLINOIS INC TOLEDO OHIO V ST A ; OWENS ILLINOIS INC TE TOLEDO OHIO VER ST V AM ; OWENS ILLINOIS PLASTIC PRODUCTS INC A CORP OF DE ; OWENS ILLINOIS INC TOLEDO OHIO US

Inventor(s):(std)**:** TOOMASU EDOWAADO DOHATEII ; AMBERG STEPHEN W ; DOHERTY THOMAS E ; DOHERTY T E ; DOHERTY T ; SUTEIIBUN UORUTAA ANBAAGU ; AMBERG S W ; AMBERG S ; DOHERTY THOMAS EDWARD ; AMBERG STEPHEN WALTER

Inventor(s): AMBERG S US ; THOMAS EDWARD DOHERTY ; AMBERG STEPHEN WALTER TOLEDO OHIO US ; AMBERG STEPHEN WALTER TOLEDO OHIO ; AMBERG STEPHEN WALTER ST JAMES ; STEPHEN WALTER AMBERG ; STEPHEN WALTER AMBERG AND THOMAS EDWARD DOHERTY ; AMBERG STEPHEN WALTER TOLEDO ; WALTER AMBERG STEPHEN ; T E DOHERTY ; S W AMBERG ; EDWARD DOHERTY THOMAS ; DOHERTY THOMAS EDWARD SETAUKET NY ; DOHERTY THOMAS EDWARD SETAUKET N Y ; DOHERTY THOMAS EDWARD SETAUKET ; DOHERTY T US

International class (IPC 8-9): A47G19/22 A47G19/23 B29C51/00 B29C53/00 B29C53/42 B29C53/44 B29C53/84 B29C61/00 B29C61/02 B29C65/00 B29C65/10 B29C65/74 B29C65/78 B29C67/00 B29C69/00 B29D22/00 B29D23/00 B29D24/00 B31C7/06 B65D1/00 B65D1/26 B65D21/02 B65D21/032 B65D8/00 (Advanced/Invention);
B29C53/00 B29C61/00 B29C65/00 B29C65/10 B29C65/78 B29D22/00 B29D23/00 B29D24/00 B65D1/00 B65D21/02 (Advanced/Non-invention);
A47G19/22 B29C51/00 B29C53/00 B29C61/00 B29C65/00 B29C65/10 B29C65/74 B29C65/78 B29C67/00 B29C69/00 B29D22/00 B29D23/00 B29D24/00 B31C7/00 B65D1/00 B65D1/22 B65D21/02 B65D21/032 B65D8/00 (Core/Invention)

International class (IPC 1-7): A47G19/22 A47G19/23 B29C17/00 B29C17/02 B29C17/03 B29C17/07 B29C24/00 B29C27/02 B29C27/14 B29C27/20 B29C27/28 B29C53/04 B29C65/10 B29D23/00 B29D23/01 B29D23/10 B29D27/00 B29F5/00 B31B17/02 B65B51/14 B65D1/00 B65D1/10 B65D1/16 B65D1/22 B65D1/26 B65D1/40 B65D11/02 B65D21/00 B65D21/02 B65D3/06 B65D8/00 B65D8/04

CPC: B65D11/02 B29C47/0023 B29C47/0057 B29C66/1122 B29C47/0042 B29C47/0061 B29C47/043 B29K2105/04 B29C47/0021 B29C47/004 B29C66/4322 B65D1/265 B29C47/0026 B29C47/0038 B29C47/0054 B29C47/0059 B29C47/0066 B29C47/0069 B29C61/025 B29C67/00 B29C69/00 B29C2793/0063 Y10T156/1002 Y10T156/1005 Y10T156/1033 Y10T156/1038 B29C66/8322 B29C66/49 B29C66/73921 B29C53/42 B29C65/103 B29C66/71 B29C66/8221

European class: B29C53/42 B29C61/02B B29C65/10 B29C66/1122 B29C66/43 B29C67/00 B29C69/00 B65D1/26B B65D11/02 L29C47/00J5 L29C47/00J6 L29C47/00J7 L29C47/00L L29C47/00L12 L29C47/00L13 L29C47/00L4 L29C47/00L5 L29C47/00L7 L29C47/00L8 L29C47/00L9 L29C66/71 L29C793/00G L29K105/04

US class: 156/187 156/189 156/196 156/198 156/215 156/218 156/277 156/285 156/322 156/443 156/446 156/497 156/499 156/580 156/69 156/85 206/520 229/400 264/230 264/342R 493/105 493/107 493/109 493/269 93/55.1R D7/521 D7/523

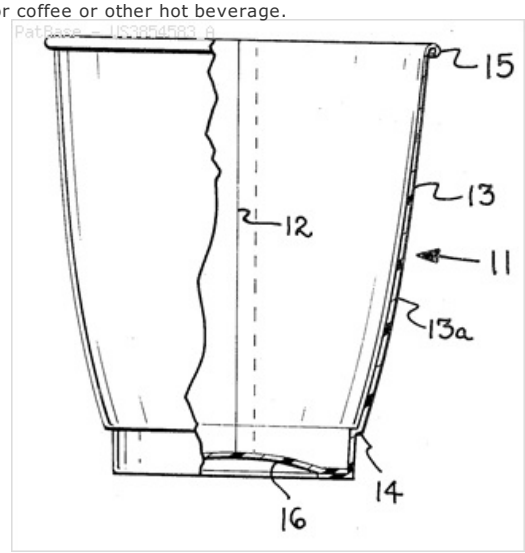
Classification Explorer

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Forward Citations: WO9527613, WO9509111, WO8606045, WO12021209, WO09129973, WO07087174, WO07024751, WO06107234, USRE35204, USD807119, USD610873, USD590564, USD559493, USD537677, USD533748, USD530569, USD530147, USD514878, USD506640, USD500429, USD489501, USD482239, USD470015, USD459946, USD457782, USD457389, US9840049, US9783649, US9758655, US9758293, US9758292, US9731888, US9725202, US9713906, US9695289, US9694962, US9688456, US9682805, US9656793, US9624348, US9562140, US9527620, US9358772, US9346605, US9340345, US9260220, US9238524, US9168714, US9155613, US9150344, US9102802, US9102461, US9089233, US9067705, US8883280, US8875935, US8727206, US8715449, US8679279, US8622232, US8567635, US8485420, US8459190, US8439221, US8408268, US8061111, US8009359, US7984846, US7938313, US7913873, US7886924, US7875143, US7866128, US7857743, US7841974, US7810537, US7628597, US7614993, US7600669, US7540834, US7513386, US7510098, US7481640, US7464857, US7464856, US7451910, US7273147, US6896506, US6764729, US6729534, US6644846, US6623236, US6536657, US6503181, US6409374, US6173858, US6010062, US5993705, US5934163, US5928741, US5830548, US5830305, US5800756, US5800647, US5766525, US5753308, US5738921, US5714217, US5709913, US5705242, US5705239, US5705238, US5705237, US5691014, US5679381, US5676905, US5665439, US5658603, US5654048, US5641584, US5631097, US5631052, US5597433, US5580624, US5580409, US5545450, US5543186, US5514430, US5506046, US5453310, US5411683, US5385764, US5176607, US5026338, US4935091, US4933041, US4691835, US4645480, US4630744, US4622026, US4581003, US4548348, US4453998, US4391666, US4299349, US4298331, US4285750, US4225302, US4208955, US4203795, US4151024, US4113824, US4108347, US4092382, US4090905, US4077829, US4039362, US2015032208, US2014263602, US2014008276, US2013013062, US2012318805, US2011228402, US2011168766, US2011146914, US2011124480, US2011108615, US2011068157, US2011067362, US2010047496, US2010044424, US2009184020, US2009170679, US2009121007, US2008093434, US2008085336, US2008047865, US2008029588, US2008023870, US2008023536, US2007228119, US2007169874, US2007157577, US2007144932, US2007125238, US2007119726, US2007114271, US2007042144, US2007029332, US2007024980, US2007014897, US2007000931, US2006289609, US2006042551, US2005227029, US2005194719, US2005153088, US2005107231, US2005102897, US2005092759, US2005029337, US2004170814, US2004071903, JP5330552, JP52150481, JP50063077, JP2012106801, GB2241195, GB2187083, GB2187083, GB2137158, FR2656942, FR2614576, FR2546130, FR2484365, FR2437283, FR2323525, EP3216720, EP3216719, EP1973783, EP1973783, EP0480675, EP0436446, EP0395585, EP0392433, EP0392433, EP0340178, EP0161597, EP0086869, EP0055844, EP0055844, EP0031917, EP0031917, EP0023738, EP0004971, DE4319536, DE3690205, DE3422199, DE3319905, DE29507067, DE2640721, DE2462343, DE2429221, DE19804221,

Abstract:
Source: US3854583A A fabricated cup or other nestable **container** in which the sidewall is formed from a rectangular sheet-like blank of a thermoplastic material, particularly an expanded thermoplastic material, the blank having its ends joined to one another in a liquid-tight seam extending the full height thereof to form a sleeve, the blank having a relatively high degree of orientation or heat-shrinkability extending circumferentially of the sleeve, the fabrication of the sidewall from the sleeve being accomplished by telescoping the sleeve over a generally frusto-conically shaped mandrel, by exposing the sleeve to heat to cause it shrink to conform to the configuration of the mandrel and by stripping the shrunken sleeve from the mandrel. A two-piece **container** may be formed from such a sidewall by affixing an end **closure** element to the bottom or smaller end of the sidewall. A one-piece **container** may also be formed in this manner by using a blank of sufficient height so that a substantial

portion of the sleeve formed therefrom extends beyond the smaller end of the forming mandrel, such substantial portion, when the sleeve is exposed to heat, being shrinkable to form an annular planar portion disposed transversely of the longitudinal axis of the mandrel and a relatively small tubulation which extends longitudinally from the interior of the annular planar portion and which, by the application of pressure thereto while at elevated temperature, may be caused to collapse and fuse together to close the bottom of the **container** in a liquid-tight manner. A **container** of this type may be used to advantage to contain any liquid or other fluent product therein in face to face contact with the interior surface of the sidewall thereof, and when the **container** is fabricated from an expanded material, because of the insulating characteristics of such material, a **container** fabricated therefrom may be used to particular advantage as a handholdable cup for coffee or other hot beverage.



395) Family number: 30560606 (US3915338A)

© PatBase

Title: Method and apparatus for tray loading of **labels** into **label** magazines

Priority: DE19730010802U 19730322 DE19730038634U 19731027 DE19732303547 19730125 DE19732314705 19730324 DE19737310802U 19730322 DE19737338634U 19731027 DE19732358579 19731124 DE19732358597 19731124 DE19740023388U 19740710 JP19740010309 19740125

Family:

Publication number	Publication date	Application number	Application date
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US3987901 A	19761026	US19740521988	19741107

Probable Assignee: KRONSEDER HERMANN 8402 NEUTRAUBLING

Assignee(s):(std)**:** DULLINGER KARL ; HERMANN KRONSEDER TE WOERTH BONDSREPUBLIEK DUITSLA ; MILLER JOSEF TH ; KRONSEDER H ; KRONSEDER HERMANN ; KRONSEDER HERMANN DT

Assignee(s): JOSEF TH MILLER BUERO UND BETRIEBSORGANISATION 4000 DUESSELDORF ; KRONSEDER HERMANN 8402 NEUTRAUBLING ; JOSEF TH MILLER BUERO UND BETRIEBSORGANISATION 400 ; KRONSEDER HERMANN 8404 WOERTH DE ; KRONSEDER HERMANN 8404 WOERTH ; HERMANN KRONSEDER TE WOERTH BONDSREPUBLIEK DUITSLAND ; JOSEF TH MILLER BUERO U BETRIEBSORGANISATION 4000 DUESSELDORF ; HERMAN KRONSEDER ; HERMANN KRONSEDER

Inventor(s):(std)**:** DULLINGER K ; DULLINGER KARL ; H KRONSEDER ; K DULLINGER ; KRONSEDER H ; KRONSEDER HERMANN ; MILLER JOSEF TH

Inventor(s): MILLER JOSEF TH 4000 DUESSELDORF ; KRONSEDER HERMANN 8404 WOERTH DE ; DULLINGER KARL 8402 NEUTRAUBLING ; DULLINGER KARL 8402 NEUTRAUBLING DE

International class (IPC 8-9): B41J11/58 B41J15/18 B65B27/08 B65B43/14 B65C1/02 B65C9/10 B65C9/12 B65D71/02 B65H1/30 (Advanced/Invention);
B41J11/58 B41J15/18 B65B27/08 B65C9/08 B65D71/02 B65H1/30 (Core/Invention);
B65C (Subclass/Invention)

International class (IPC 1-7): B31D1/00 B31D3/04 B41J11/58 B65B25/14 B65B27/08 B65B35/32 B65B43/00 B65B51/14 B65B53/02 B65B63/02 B65B9/12 B65C9/00 B65C9/08 B65C9/10 B65D61/00 B65D63/10 B65D63/18 B65D71/02 B65D75/00 B65D83/08 B65D85/00 B65D85/16 B65D85/62 B65H1/02 B65H1/08 B65H1/26 B65H1/30

CPC: B41J11/58 B41J15/18 Y10S206/813 B65C9/10 B65D71/02

European class: B41J11/58 B41J15/18 B65C9/10 B65D71/02

US class: 156/DIG.29 206/451 206/460 206/813 221/1 221/198 271/149

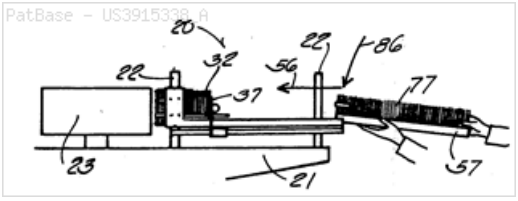
Classification Explorer

Cited documents: US3851762 A, US3780854 A, US3767188 A, US3709402 A, US3698547 A, US3580474 A, US3468531 A, US3459297 A, US3351185 A, US3333731 A, US3331105 A, US3291483 A, US3226109 A, US3126680 A, US3032339 A, US2956674 A, US2485789 A, US2291010 A, US2222072 A, US2018611 A, JPS4728481 B1, JP47028481 B4, JP46032987 A2, JP41010676 A2, DE679452 A, DE2145508 A1, DE2116912 A1, DE2014410 A,

Forward Citations: WO9625347, WO9615034, WO9608435, WO04069663, USH1748, USD700781, US9776763, US9693640,

US9560920, US9439518, US9345340, US9332861, US9295344, US9266646, US9237815, US8893888, US8167018, US8066048, US7507379, US7469890, US7367445, US7325376, US7021886, US6749193, US6513303, US6443303, US6041572, US6021890, US5569353, US5501387, US5478185, US5398931, US5184752, US5078076, US5033620, US5024348, US4799605, US4793482, US4627219, US4565596, US4540614, US4511608, US4264009, US4240757, US4082262, US4076122, US4052052, US4025385, US4005792, US2016022097, US2015360812, US2015048108, US2014110299, US2012273387, US2012080444, US2007069455, US2007000748, US2006191643, US2006191426, US2005152809, US2005098941, US2005000842, US2004172794, US2003193129, US2003141651, JP64045232, JP1045232, GB2492530, FR2685298, EP2072406, EP1873096, EP1683748, EP1613545, EP1352861, EP0844192, EP0803446, EP0725018, EP0259515, EP0075644, DE4213463, DE4120480, DE3630925, DE3536294, DE3534664, DE3503621, DE3242192, DE19720244, DE19712193, DE10304803, DE102007062471, AU687246,

Abstract:
Source: US3915338A Method and apparatus for loading stacked **labels** into a **label** feed magazine having a retractable **label** pusher platen behind any "old" **labels** thereon. A stack of "new" **labels** is assembled into a tray-carrier which is slightly smaller in profile than the magazine and which holds the **labels** in stacked relation. The loaded tray-carrier is transported to the magazine and is telescoped therewithin to advance the **label** stack in the tray-carrier toward the "old" **labels** already in the magazine. The **label** pusher platen is repositioned behind the rearmost **label** in the "new" **label** stack and the tray-carrier may be removed rearwardly from the magazine or left in position within the magazine. The tray-carrier is preferably made of lightweight disposable material, such as cardboard or plastic, and desirably comprises a trough having one **open** end and low sides. After the tray-carrier is loaded with a **label** stack it may be **covered** with a shrink film or similar pliant **cover** which cooperates with the trough to hold the stack in position and to keep it clean.



396) Family number: 40966639 (US3846518A)

© PatBase

Title: PORT SYSTEM FOR MEDICAL HUMIDIFIER **CONTAINER**

Priority: US19720264315 19720619

Family:

Publication number	Publication date	Application number	Application date
AU197353138 A1	19740912	AU19730053138	19730309
BE797604 A	19730716	BE19730129507	19730330
CA973228 A1	19750819	CA19730165275	19730305
ES190605 U	19740516	ES19730190605U	19730412
ES190605 Y	19741116	ES19730190605U	19730412
FR2189083 A1	19740125	FR19730012062	19730404
FR2189083 B1	19781201	FR19730012062	19730404
GB1433888 A	19760428	GB19730026931	19730606
IT979848 A	19740930	IT19730048807	19730314
JP49051795 A2	19740520	JP19730052039	19730510
PH9778 A	19760317	PH19730014705	19730607
US3846518 A	19741105	US19720264315	19720619

Probable Assignee: AMERICAN HOSPITAL SUPPLY CORP

Assignee(s):(std)**:** AMERICAN HOSPITAL SUPPLY CORP ; MCPHEE C

Assignee(s): WELLS FARGO BANK NA ; MCPHEE CHARLES J ; MCGAW INC A CORP OF DELAWARE ; AMERICAN HOSPITAL SUPPLY CORP 1740 RIDGE AVENUE EV ; AMERICAN HOSPITAL SUPPLY CORP 1740 RIDGE AVENUE EVANSTON ILLINOIS E U A ; AMERICAN HOSPITAL SUPPLY CORP US ; AMERICAN HOSPITAL SUPPLY K CHARLES J MCPHEE CORP ; MCGAW INC

Inventor(s):(std)**:** MCPHEE C J ; MCPHEE C ; MC PHEE C ; MCPHEE CHARLES J

Inventor(s): MCPHEE C US ; CJ MCPHEE ; CHARLES J MCPHEE ; C J MCPHEE

International class (IPC 8-9): A61M15/00 A61M16/00 A61M16/16 B01F3/04 F16L41/02 (Advanced/Invention);
A61M16/00 (Advanced/Non-invention);
A61M15/00 A61M16/00 A61M16/10 B01F3/04 F16L41/02 (Core/Invention)

International class (IPC 1-7): A61M11/00 A61M15/00 A61M16/00 B01F3/04 B65D47/02 B65D47/36 B65D55/00 F16L39/00 F16L41/02

CPC: Y10S261/65 Y10S285/921 F16L41/02 A61M16/16 A61M2209/06

European class: A61M16/16 F16L41/02 K61M209/06

US class: 128/200.13 222/400.7 261/12.3 261/123 261/DIG.65 285/921

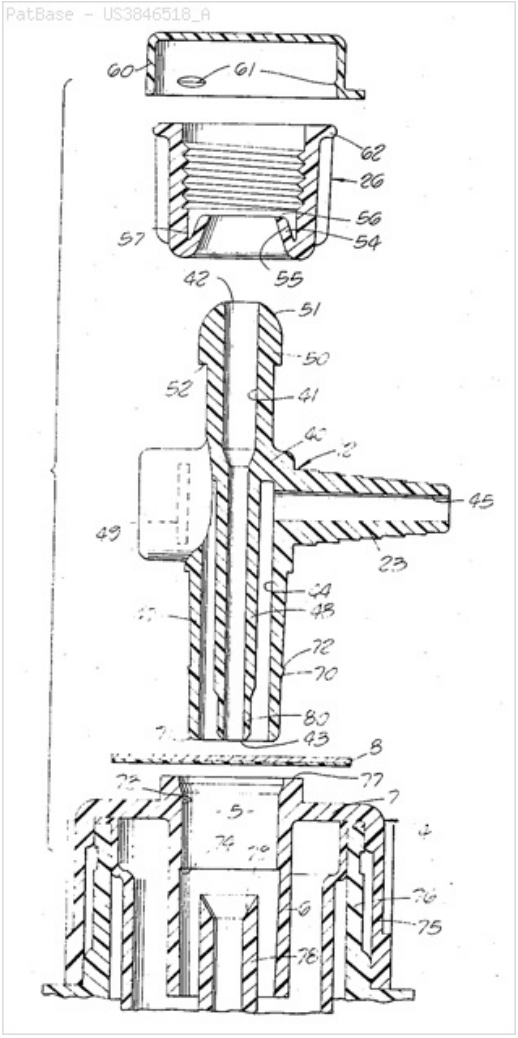
Classification Explorer

Cited documents: US3610478 A, US3605947 A, US3572660 A, US3509879 A, US3353536 A, US3262721 A, US3221935 A, US2969895 A, US2884924 A, GB877707 A, FR1598690 A, FR1129784 A, CA562012 A,

Forward Citations: WO9804311, WO8801249, WO8400505, USD558927, USD558926, US8545120, US8496139, US7377707, US6495111, US6488427, US5916493, US4834266, US4464316, US4353507, US4292060, US4039639, US4012472, US4011288, US2010155419, GB2549349, GB2208904, FR3028416, ES2570393, EP1514569, DE3234789, CN106039507, CN105056356, CN103727339,

Abstract:
Source: US3846518A A dual passage adapter for providing an inlet-outlet port system that couples a medical liquid bottle to a medical gas source. The adapter has a snap lock feature which permanently connects it to the medical liquid bottle so the adapter can be used with only one bottle to reduce risk of cross-contamination among patients. Gas and liquid are mixed in the bottle and exit through the adapter as humidified gas which a patient breathes during inhalation therapy.

PatBase - US3846518_A



397) Family number: 1428658 (US3764425A)

Title: APPARATUS AND METHOD FOR THE MANUFACTURE OF TUBULAR **CONTAINERS**

Priority: AU19720050433 19721222 US19720216502 19720110

Family:

Publication number	Publication date	Application number	Application date
AU197250433 A1	19740711	AU19720050433	19721222
AU453551 B2	19740912	AU19720050433	19721222
CH561116 A	19750430	CH19730000211	19730109
DE2300914 A1	19730719	DE19732300914	19730109
FR2167559 A1	19730824	FR19720046894	19721229
FR2167559 B1	19760827	FR19720046894	19721229
GB1357708 A	19740626	GB19720058538	19721219
IT978078 A	19740920	IT19730019117	19730110
JP48081676 A2	19731101	JP19730005491	19730109
JP4881676 A2	19731101	JP19730005491	19730109
US3764425 A	19731009	US19720216502	19720110
ZA7209081 A	19731031	ZA19720009081	19721227

Probable Assignee: BRH CORP

Assignee(s):(std)**:** KENNETH VAN MORRISON ; MILPRINT INC ; ROBERT OTTO NEFF ; WILLIAM DAVID GROECHEL

Assignee(s): BRH A CORPOF WI CORP ; BRH CORP ; MILPRINT INC MILWAUKEE WIS V ST A ; MILPRINT INC US

Inventor(s):(std)**:** GROECHEL W ; GROECHEL WILLIAM DAVID ; MILWAUKEE WIS ; MORRISON K ; MORRISON K VAN ; MORRISON KENNETH VAN ; NEFF ROBERT OTTO ; NEFF R

Inventor(s): NEFF R US ; ROBERT OTTO NEFF ; ROBERT OTTO NEFF KENNETH VAN MORRISON AND WILLIAM DAVID BROECKEL ; VAN MORRISON K ; WILLIAM DAVID GROECHEL ; MORRISON KENNETH VAN NAPERVILLE ILL ; MORRISON K US ; KENNETH VAN MORRISON ; GROECHEL W US

International class (IPC 8-9): B29C31/00 B29C53/42 B29C65/78 B29C65/80 B29C69/00 B29D23/20 B65D35/10 (Advanced/Invention); B29C31/00 B29C53/00 B29C65/78 B29C69/00 B29D23/20 B65D35/02 (Core/Invention)

International class (IPC 1-7): B21C37/08 B21D39/02 B21D51/36 B29C27/02 B29D23/00 B29D23/20 B31B1/34 B31B17/00 B65B B65D35/00 B65D35/10 B65D35/12

CPC: B29C65/7847 Y10T156/1021 Y10T156/1038 Y10T156/1062 Y10T156/1075 B29D23/20 B29C31/002 B29C47/0021 B29C47/0059 B29C53/42 B29C65/7885 B29C65/80 B29C69/00 B29K2023/06 B29K2077/00 B29K2705/02 B29L2009/003 B29L2023/20 B29C66/5344 B29C66/83221 B29C66/112 B29C66/1122 B29C66/135 B29C66/4322 B29C66/71 B29C66/8242 B29C66/72321 B29C66/72328 B29C66/7234

European class: B29C31/00B B29C53/42 B29C65/78M6B2 B29C65/80 B29C69/00 B29D23/20 L29C47/00J5 L29C47/00L9 L29C66/112 L29C66/1122 L29C66/135 L29C66/4322 L29K23/06 L29K705/02 L29K77/00 L29L23/20 L29L9/00C

US class: 156/208 156/218 156/256 156/264 156/443 156/449 156/583.1 156/6.9 156/69 493/297 493/308

Classification Explorer

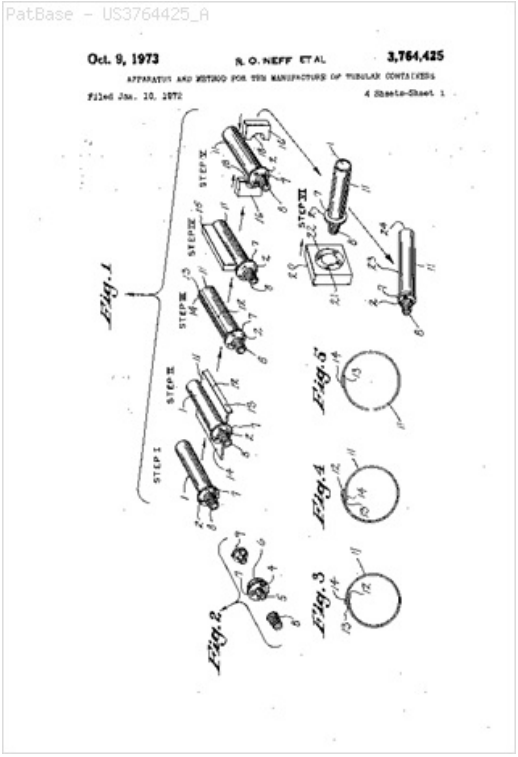
Cited documents: FR1241073 A,

Forward Citations: WO05009843, WO05009843, US9539760, US8906187, US8783515, US7448187, US7172546, US6722104, US6558305, US6234228, US6127011, US5962096, US5910228, US5800770, US5785801, US5632951, US4968369, US4878985, US4838964, US4664684, US4310366, US4252585, US4200482, US4111738, US4053346, US4035222, US4013496, US3959066, US3948704, US2016176106, US2009324864, US2006105077, US2006094580, JP5940067, JP2013541472, FR2702738, FR2511294, FR2407063, FR2367601, EP0677374, EP0222104, EP0222104, EP0038488, EP0038488, DK154402, DE2742294, DE2739239,

Abstract:

Source: US3764425A ABSTRACT OF THE DISCLOSURE
Apparatus and methods for the manufacture of tubular **containers** of the type comprising a tubular body of flexible **packaging** material joined to an end **closure** mem- 15 ber wherein the end **closure** member is first supported on a mandrel, a flat sheet of the body material is fed to the mandrel and folded into a tube around the end **closure** member and thereafter joined thereto to form a completed **container**. As a further feature, the apparatus may 20 include means for thermally reflowing a portion of the end **closure** member if it is of a construction which includes a radially-extending flange that is thermally re-flowable to the final position in which it is disposed axi-ally of the **container** body. 25 B

PatBase - US3764425_A



398) Family number: 1741645 (US3795085A)

Title: DEVICE FOR THE EVACUATION, CLIPPING AND TRIMMING OF **BAG**-LIKE **PACKAGES**

Priority: US19720219415 19720120

Family:

Publication number	Publication date	Application number	Application date
DE2302700 A1	19730802	DE19732302700	19730119
DE2302700 C2	19860327	DE19732302700	19730119
GB1411481 A	19751029	GB19730002594	19730118
JP49012986 A2	19740204	JP19730009104	19730120
JP52022312 B4	19770616	JP19730009104	19730120
JP898201 C3	19780225	JP19730009104	19730120
US3795085 A	19740305	US19720219415	19720120

Probable Assignee: DELAWARE CAPITAL FORMATION INC

Assignee(s):(std)**:** ACRALOC CORP ; RHEEM MFG CO

Assignee(s): RHEEM MFG US ; RHEEM MFG CO NEW YORK N Y ; RHEEM MFG CO NEW YORK N Y US ; ACRALOC CORP OAK RIDGE TENN ; ACRALOC CORP OAK RIDGE TENN US ; ACRALOC CORP US ; CHASE MANHATTAN BANK NA ; DELAWARE CAPITAL FORMATION INC

Inventor(s):(std)**:** ANDRE L ; ANDRE LOREN GEORGE ; BARTHALOMEW WAYNE R ; OAK RIDGE TENN ; WORLINE P ; BARTHALOMEW W ; WORLINE PAUL WILLIAM

Inventor(s): WORLINE PAUL WILLIAM OAK RIDGE TENN ; WORLINE PAUL WILLIAM OAK RIDGE TENN US ; BARTHALOMEW W US ; WORLINE P US ; ANDRE LOREN GEORGE CINCINNATI OHIO ; ANDRE LOREN GEORGE CINCINNATI OHIO US ; ANDRE L US

International class (IPC 8-9): B65B31/06 (Advanced/Invention); B65B31/04 (Core/Invention)

International class (IPC 1-7): B65B31/02 B65B31/04 B65B31/06 B65B5/04 B65B51/04 B65B7/02

CPC: B65B31/06

European class: B65B31/06

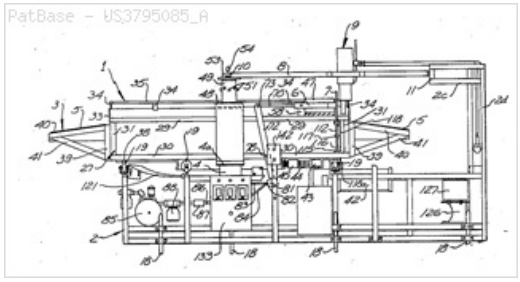
US class: 53/138.3 53/512 53/79

Classification Explorer

Cited documents: US3700387 A, US3648430 A, US3094825 A, US2630955 A, DE2103668 A1,

Forward Citations: WO8500338, WO09023823, USD778972, USD760827, USD737352, USD729294, US9809339, US9555907, US9242752, US8661838, US8606393, US8578682, US8561663, US8423179, US8397472, US8272191, US8011167, US8006463, US7832182, US7770367, US5586424, US5269054, US5020298, US4754596, US4578928, US4189897, US4035982, US2011300278, US2011107726, US2011036054, US2011016825, US2010107566, US2009158688, US2009044488, US2008250755, JP61039444,

Abstract:
Source: US3795085A A device for the evacuation, clipping and trimming of product containing, **bag**-like **packages** comprising a rotatable assembly having a circular table portion, a plurality of radially oriented evacuation nozzles and clamping means for each nozzle for **sealingly** affixing a product containing **bag**-like **package** thereon. The device has circumferentially arranged about the rotating assembly a **bag** insertion position having clamp closing means, vacuum initiating means, vacuum terminating means, means to clip the **bag**-like **package** and to trim the excess end therefrom, clamp releasing means, means to divert the **package** from the table portion of the rotating assembly to further processing equipment and means to dispose of the excess **bag** end. Finally, means are provided to rotate the assembly and each of its nozzle and clamping means through the above noted positions.



399) Family number: 3762910 (GB1326697A)

Title:	PARALLELEPIPEDIC **PACKAGES**
Priority:	GB19710053372 19711117

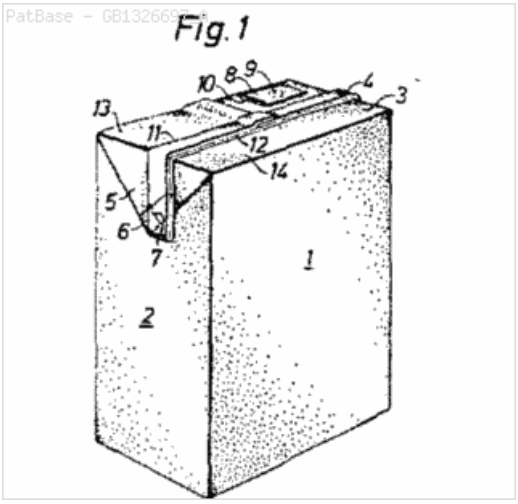
Family:

Publication number	Publication date	Application number	Application date
GB1326697 A	19730815	GB19710053372	19711117

Probable Assignee:	TETRA PAK INT
Assignee(s):(std)**:**	TETRA PAK INT
Assignee(s):	TETRA PAK INTERNATIONAL AB
International class (IPC 8-9):	B65D5/06 (Advanced/Invention); B65D5/02 (Core/Invention)
International class (IPC 1-7):	B65D5/26 B65D75/62
CPC:	B65D5/065
European class:	B65D5/06C1

Classification Explorer

Abstract:
Source: GB1326697A 1326697 Parallele pipedic **packages** TETRA PAK INTERNATIONAL AB (A R RANSING) 17 Nov 1971 53372/71 Heading B8C A parallelepipedic **package** has a discharge spout at its upper end formed by a triangular flap 5 which has a separable end portion 6, and an air hole 9 which is **covered** by a strip 8 in the upper end wall 3, the side walls of the filled and **sealed** **package** buckling inwardly until the **cover** strip 8 is removed, when they buckle outwardly. The end portion 6 is defined by a perforation line 7 passing partly through the **package** material. The **cover** strip 8 is **sealed** to an inner and/or outer thermoplastics layer of the **package** **covering** the air hole 9 and has a gripping flap 10. The **package** is formed from a web of material which is formed into a tube, filled, heat **sealed** transversely to the tube axis, and severed along the heat **seals** to form individual **packages** which are given a parallelepipedic shape before or after severance. The side walls are subjected to an inward pressure before and during **sealing** to cause them to buckle inwardly. The **tabs** 11 formed during **sealing** are folded against the end walls and the upper and lower triangular flaps 5 formed during shaping are folded and **sealed** against the side walls 2 and the bottom wall 3 respectively. The web may consist of a base material of paper, paper lined on both sides with plastics, or a combination of paper and a metal foil with an intermediate plastics layer. A layer of thermoplastics may be provided on the inside and/or outside of the base material.



400) Family number: 1100754 (US3843034A)

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Title: DEVICE FOR SEVERING A PREFERABLY MOISTENED TISSUE WEB

Priority: DE19722204402 19720131 DE19722209191 19720226

Family:

Publication number	Publication date	Application number	Application date
DE2204402 A1	19730816	DE19722204402	19720131
DE2204402 B2	19750109	DE19722204402	19720131
DE2204402 C3	19750814	DE19722204402	19720131
DE2209191 A1	19730906	DE19722209191	19720226
DE2209191 B2	19760325	DE19722209191	19720226
DE2209191 C3	19761111	DE19722209191	19720226
GB1406124 A	19750917	GB19730003873	19730125
JP48087949 A2	19731119	JP19730012821	19730131
US3843034 A	19741022	US19730328265	19730131

Probable Assignee: WALKER KURT DR MED

Assignee(s):(std)**:** WALKER K ; WALKER KURT DR MED

Assignee(s): WALKER KURT DR MED 7000 STUTTGART ; WALKER KURT DRMED ; WALKER K DT

Inventor(s):(std)**:** LEWANDOWSKY K ; LEWANDOWSKY KLAUS

Inventor(s): LEWANDOWSKY KLAUS 7120 BIETIGHEIM ; LEWANDOWSKY K DT

International class (IPC 8-9): A47K10/32 A47K10/36 B26D1/02 B65H16/00 B65H35/00 (Advanced/Invention); A47K10/24 B26D1/01 B65H16/00 B65H35/00 (Core/Invention)

International class (IPC 1-7): A47K10/22 A47K10/32 A47K10/36 B26F3/02 B65H35/00 B65H37/00

CPC: Y10T225/243 Y10T225/321 Y10T225/393 A47K10/32 A47K2010/3266 B65H35/0046

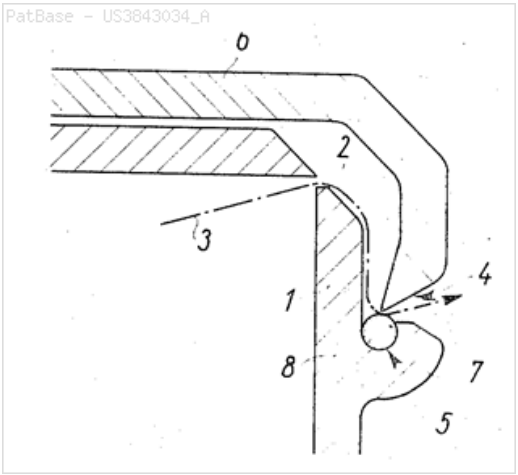
European class: A47K10/32 B65H35/00B2D K47K10/32W

US class: 225/106 225/4.3 225/43 225/96

Classification Explorer

Forward Citations: WO8301054, WO06037944, WO04037061, USD700837, US9402512, US8777053, US7428966, US7357274, US6994292, US6749097, US6575345, US6083091, US5383590, US4787543, US4566606, US4212389, US4196647, US2015173572, US2005173281, US2004144825, US2003111481, NL1016518, GB2439538, GB2439538, GB2130998, EP2233403, DE3844022, DE2755921, DE10355901, DE10355901, DE102004009421,

Abstract:
Source: GB1406124A 1406124 **Dispensing** web material K WALKER 25 Jan 1973 [31 Jan 1972 26 Feb 1972] 3873/73 Heading B8M [Also in Division B4] A **storage** and **dispensing** **container** 1 for a web 3, e.g. a fleecy web impregnated with pharmaceutical or cosmetic liquid, comprises a **dispensing** slit 2 and spaced from the slit a cutting device constituted by a knife edge 4 and a support 5 consisting at least partially of resilient material. As described the **container** 1 is generally cylindrical with one fixed and one removable end wall. The end walls have internal ridges 25 to receive and guide the axle of a roll of web 3, and external recesses to receive journals provided on the end walls of a **cover** 6 pivoted in this way to the **container**. The **cover** is snapped into place and prevents removal of the removable end wall. The **cover** may carry the knife edge or support and the **container** may carry the complementary member. The support preferably includes a strip 8, e.g. of foam rubber, and this may have a groove to receive the knife edge. The knife edge may be serrated or corrugated and of plastics or metal. The **cover** may be spring urged towards the **container**. The web may be in the form of a folded stack and may be impregnated whilst in the **container**.



401) Family number: 1335214 (US3768719A)

Title:	CARTON HAVING A **BAG**-LIKE LINER
Priority:	US19710163218 19710716

Family:

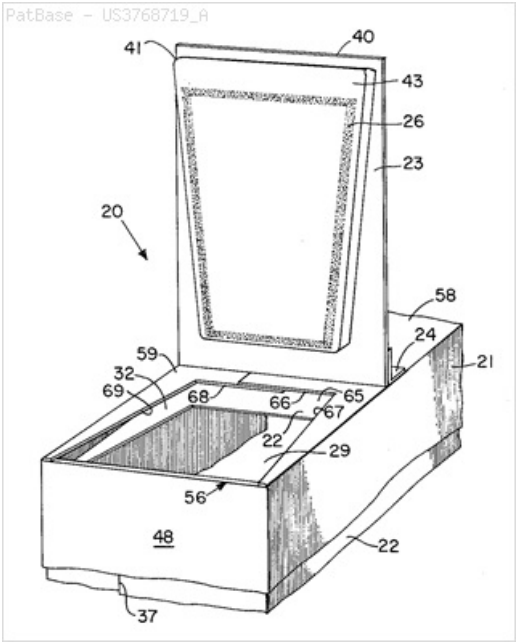
Publication number	Publication date	Application number	Application date
CA966463 A1	19750422	CA19720147167	19720714
GB1375935 A	19741204	GB19720033390	19720717
JP48062571 A2	19730831	JP19720071542	19720717
US3768719 A	19731030	US19710163218	19710716

Probable Assignee:	PROCTER AND GAMBLE
Assignee(s):(std):	PROCTER AND GAMBLE
Assignee(s):	PROCTER AND GAMBLE CO ; PROCTER AND GAMBLE CO THE ; PROCTER AND GAMBLE CO US ; PROCTER AND GAMBLE COMPANY THE ; PROCTER GAMBLE CO ; JOHNSON CHARLES L
Inventor(s):(std):	JOHNSON C ; JOHNSON CHARLES L
Inventor(s):	JOHNSON C US
International class (IPC 8-9):	B65D25/16 B65D5/54 B65D5/56 B65D5/60 B65D5/66 (Advanced/Invention); B65D25/14 B65D5/54 B65D5/56 B65D5/64 (Core/Invention)
International class (IPC 1-7):	B65D25/14 B65D25/16 B65D5/56
CPC:	B65D5/5405 B65D5/60
European class:	B65D5/54B B65D5/60
US class:	229/117.3 229/122.2 229/123.1 229/125.09 229/208 229/222 229/232

Classification Explorer

Cited documents:	US3640447 A, US3580466 A, US3426955 A, US3269635 A, US3136471 A, US3127082 A, US2719663 A, US2577304 A, US2361408 A,
Forward Citations:	WO9962773, WO9930974, WO0102259, US9868563, US9796512, US9701438, US9463896, US9346582, US9346234, US9156582, US9156579, US9113648, US9108761, US8727205, US8727204, US8672214, US8226794, US8196805, US8025618, US7984844, US7959060, US7938312, US7913897, US7717322, US7699214, US7658318, US7285082, US6845902, US6395318, US6355286, US6338864, US6273332, US6261615, US6213388, US6145736, US6116499, US6062467, US5694746, US5083675, US4990200, US4775098, US4433808, US4411365, US4126263, US4113103, US3944127, US2016194119, US2011139864, US2010282828, US2010051661, US2010006635, US2009151195, US2009050682, US2008185389, US2007221713, US2007119914, US2007095881, US2006283928, US2006283927, US2005019452, US2004065722, JP63096025, EP0072931, EP0072931, AU754011,

Abstract:
Source: US3768719A A **container** comprising a carton having a freshness-preserving liner disposed therein wherein superimposed apertures having substantially wholly die-cut lineaments are **opened** in said carton and said liner substantially simultaneously upon **opening** of the **container**.



402) Family number: 6722035 (US4074961A)

Title: APPARATUS FOR PRODUCING **CONTAINERS**

Priority: DE19722210013 19720302 US19730333723 19730220 US19750602223 19750806 US19750499155 19750821 US19750575170 19750507

Family:

Publication number	Publication date	Application number	Application date
AT120273 A	19760415	AT19730001202	19730209
AT334278 B	19760110	AT19730001202	19730209
CH554274 A	19740930	CH19730002018	19730213
DE2210013 A1	19730906	DE19722210013	19720302
DE2210013 C2	19820812	DE19722210013	19720302
FR2174588 A5	19731012	FR19730006781	19730226
GB1389533 A	19750403	GB19730010176	19730302
IT983345 A	19741031	IT19730012478	19730226
JP1096141 C3	19820514	JP19730023338	19730228
JP48100277 A2	19731218	JP19730023338	19730228
JP56034496 B4	19810811	JP19730023338	19730228
NL178775 B	19851216	NL19730002771	19730228
NL178775 C	19860516	NL19730002771	19730228
NL7302771 A	19730904	NL19730002771	19730228
US4074961 A	19780221	US19760675275	19760409

Probable Assignee: ALTSTAEDTER VERPACK VERTRIEB

Assignee(s):(std)**:** ALTSTAEDTER VERPACK VERTRIEB ; ALTSTAEDTER GMBH

Assignee(s): ALTSTADTER VERPACKUNGS VERTRIEBS GMBH ; ALTSTADTER VERPACKUNGS VERTRIEBS DT ; ALTSTADTER VERPACKUNGS VERTRIEBS G M B H ; ALTSTADTER GMBH ; ALTSTADTER VERPACKUNG VERTRIEBS G M B H ; ALTSTAEDTER VERPACKUNGS VERTRIEBSGMBH 6102 PFUNGST ; ALTSTAEDTER VERPACKUNGS VERTRIEBSGESELLSCHAFT MBH ; ALTSTAEDTER VERPACKUNGS VERTRIEBS GMBH ; ALTSTAEDTER VERPACKUNGS VERTRIEBS GMBH TE PFUNGSTA ; ALTSTAEDTER VERPACKUNGS VERTRIEBSGMBH ; ALTSTAEDTER VERPACKUNGS VERTRIEBSGESELLSCHAFT MBH 6102 PFUNGSTADT DE ; ALTSTAEDTER VERPACKUNGS VERTRIEBS GMBH TE PFUNGSTADT BONDSREPUBLIEK DUITSLAND ; ALTSTAEDTER VERPACKUNGS VERTRIEBSGMBH 6102 PFUNGSTADT

Inventor(s):(std)**:** REIL WILHELM

Inventor(s): REIL WILHELM 6148 BENSHEIM AUERBACH ; REIL WILHELM 6148 BENSHEIM AUERBACH DE

International class (IPC 8-9): B29C45/04 B29C45/14 B29C65/18 B29C69/00 B31B17/00 B65D1/10 B65D25/44 B65D47/06 B65D5/74 B65D85/80 (Advanced/Invention);
B29C45/03 B29C45/14 B29C65/18 B29C69/00 B31B17/00 B65D1/00 B65D25/38 B65D47/06 B65D5/74 B65D85/72 (Core/Invention)

International class (IPC 1-7): B29F1/10 B31B17/60 B65D1/10 B65D15/08 B65D3/10 B65D5/12 B65D5/40 B65D5/56 B65D5/74 B65D6/32 B65D6/40 B65D77/00 B65D85/72 B65D85/80

CPC: B29C66/542 B29C66/549 B65D47/063 B29C45/04 B29C45/14 B29C45/14467 B29C47/0021 B29C47/0038 B29C47/0059 B29C47/02 B29C65/18 B29C66/80 B29C69/00 B65D15/08 B65D15/22 B65D25/44 B29C66/83221 B29C66/8161 B31B2105/0025 B29C66/1122

European class: B29C45/04 B29C45/14 B29C45/14G B29C65/18 B29C66/80 B29C69/00 B31B17/00 B65D15/08 B65D15/22 B65D25/44 B65D47/06A1 L29C47/00J5 L29C47/00L L29C47/00L9 L29C47/02 L31B217/08D

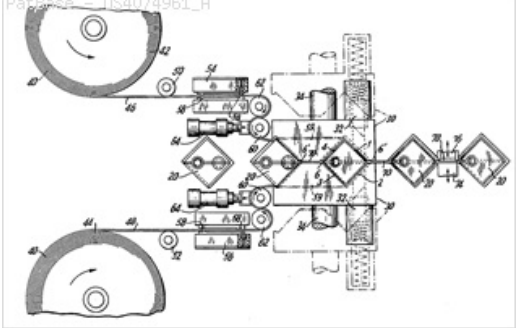
US class: 264/263 425/112 425/129.1

Classification Explorer

Cited documents: US3780559 A, US3743458 A, US3709967 A, US3511902 A, US3476852 A, US3154617 A, GB1367468 A, FR932252 A, DE1695992 A1, CH385100 A,

Forward Citations: WO9955588, USD511454, US7950204, US6962032, US6775959, US6748720, US6112498, US6085496, US6085495, US6038838, US6035615, US6035604, US5487253, US5103988, US5058801, US4706874, US4604850, US4564139, US4547416, US4544588, US2009000255, US2003101684, JP58203839, GB2139592, FR2777863, FR2421045, EP1862395, EP0229984, EP0079547, EP0052261, DE4005257, DE3601352, DE3217156, DE3139780, DE3043134, DE102005010639,

Abstract:
Source: US4074961A A **container** for storing liquids is injection molded of thermoplastic material in apparatus which includes a plurality of central die members intermittently movable in succession along a given direction and a pair of side die members flanking said central die members and movable into and out of operative engagement therewith. The **container** is injection molded within a die cavity formed between the central die members and the side die members with two sheets of a base material being fed from opposite sides of said central die members into said die cavity to form a base member for said **container**. The **container** base member formed from said sheets of base material is engaged about the central die members and when the side die members are brought into operative engagement with the central die members thermoplastic material is injected into the die cavity formed therebetween and the **container** is produced by injection molding the thermoplastic material integrally with the base member within the die cavity. The die cavity is configured to form the **container** with an **open** bottom end having a bottom **closure** member partially connected thereto to enable bottom filling of the **container** and subsequent **sealing** of the bottom end by pivoting of the bottom **closure** member into **sealing** engagement with the bottom end of the **container**. After the injection molding process is completed, the side die members are separated from the central die members and the formed **container** is ejected from the central die member about which it is formed. During the injection molding process the sheets of base material are joined together by a **seal** formed between the edges thereof in order to enable the sheets to be pulled along with the central die members as they move through the apparatus in the performance of the injection molding process.



403) Family number: 1123602 (US3835224A)

Title: TEAR STRIP **SEALING** STRUCTURE FOR BLISTER **PACKAGES**

Priority: US19710121010 19710304 US19720236463 19720320 US19720256411 19720524 US19740452913 19740320

Family:

Publication number	Publication date	Application number	Application date
US3758312 A	19730911	US19710121010	19710304
US3835224 A	19740910	US19720236463	19720320
US3865953 A	19750211	US19720256411	19720524
US3901000 A	19750826	US19740452913	19740320

Probable Assignee: PETERS L

Assignee(s):(std)**:** PETERS L ; PETERS LEO

Assignee(s): PETERS L US

Inventor(s):(std)**:** PETERS L ; PETERS LEO

Inventor(s): PETERS L US

International class (IPC 8-9): B65B11/50 B65D75/36 B65D85/74 (Advanced/Invention); B65B11/50 B65D75/28 B65D85/72 (Core/Invention)

International class (IPC 1-7): A23C15/00 A23D3/02 A23L3/00 B65B23/00 B65B25/06 B65B5/04 B65D11/00 B65D6/00 B65D83/00 B65D85/74

CPC: B65D75/36 B65D75/366 B65D2575/365 B65D75/367 B65D85/74 B65B11/50 B65D75/326 B65D75/327

European class: B65B11/50 B65D75/32D1 B65D75/32D3 B65D75/36 B65D75/36F B65D75/36H B65D85/74 L65D575/36Y1D

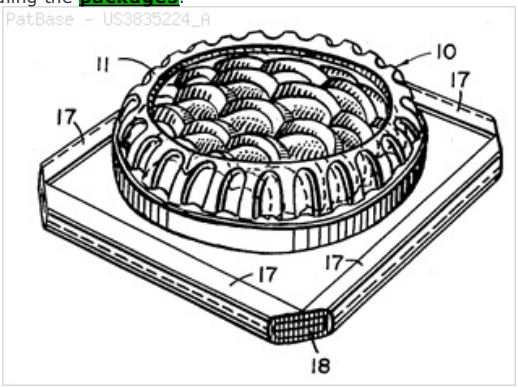
US class: 206/459.5 206/461 206/467 206/470 206/471 206/499 206/521 206/526 206/592 426/104 426/106 426/108 426/119 426/124 426/130 426/389 426/392 426/396 53/14 53/140 53/412 99/179 D1/115 D7/675

Classification Explorer

Cited documents: US3758312 A, US3640449 A, US3615714 A, US3529976 A, US3498018 A, US3456784 A, US3398000 A, US3362617 A, US3317326 A, US3256975 A, US3249217 A, US3230092 A, US3122441 A, US3104172 A, US3095967 A, US3054679 A, US2941660 A, US2931493 A, US2813799 A, US2688557 A, US2679281 A, US2657998 A, US1500611 A, US1446782 A,

Forward Citations: WO13034624, WO06027159, USD605829, USD510788, USD509043, USD433626, USD428332, USD418408, US9592951, US9352886, US8895091, US8658234, US8574646, US7829131, US7226628, US7185760, US6446546, US6231906, US6227369, US6176375, US6053321, US5858428, US5782735, US5236749, US5035022, US4494654, US4452356, US4319684, US4251712, US3865953, US2015136777, US2014339105, US2014010927, US2013327777, US2013302475, US2013004625, US2011027449, US2011020505, US2010159112, US2010021603, US2009053370, US2008020101, US2008020100, US2007105229, US2007102317, US2006096887, US2004262187, US2004251160, US2004159561, US2004149135, JP57035269, ITMI20111615, GB2519328, GB2163130,

Abstract:
Source: US3835224A A blister-type **package** having extended edges that serve as tear-**opening** guidelines for outside-applied tape that bonds said edges together, and a method for **sealing** and unsealing the **packages**.



404) Family number: 25668349 (US3905477A)

Title: TAMPERPROOF POUCH **LABEL**

Priority: US19720234634 19720314 US19720234634 19720314 US19740484249 19740628

Family:

Publication number	Publication date	Application number	Application date
AT221873 A	19770715	AT19730002218	19730313
AT342491 B	19780410	AT19730002218	19730313
AU197353189 A1	19740912	AU19730053189	19730312
BE796709 A	19730913	BE19730128741	19730313
BR7301760 A0	19740725	BR19730001760	19730313
CA1024478 A1	19780117	CA19730162772	19730202
CH576377 A	19760615	CH19730003644	19730313
DD105589 A	00000000	DD19730169412	00000000
DD105589 C	19740505	DD19730169412	19730313
DE2312371 A1	19730927	DE19732312371	19730313
DE2312371 B2	19780810	DE19732312371	19730313
DE2312371 C3	19790412	DE19732312371	19730313
DK134269 B	19761011	DK19730001275	19730308
DK134269 C	19770314	DK19730001275	19730308
FI53286 B	19771230	FI19730000753	19730313
FI53286 C	19780410	FI19730000753	19730313
FR2175999 A1	19731026	FR19730008928	19730313
FR2175999 B1	19770422	FR19730008928	19730313
GB1415073 A	19751126	GB19730012030	19730313
IL41764 A0	19730531	IL19730041764	19730313
IL41764 A1	19750313	IL19730041764	19730313
IT981371 A	19741010	IT19730021563	19730313
JP49004500 A2	19740116	JP19730028621	19730313
JP494500 A2	19740116	JP19730028621	19730313
JP52009999 B4	19770319	JP19730028621	19730313
JP881818 C3	19770913	JP19730028621	19730313
NL157806 B	19780915	NL19730003506	19730313
NL7303506 A	19730918	NL19730003506	19730313
NO138404 B	19780522	NO19730001002	19730313
NO138404 C	19780906	NO19730001002	19730313
SU626684 D	19780930	SU19731893494	19730313
US3905477 A	19750916	US19740484249	19740628
ZA7300589 A	19731031	ZA19730000589	19730126

Probable Assignee: UNION CARBIDE CORP

Assignee(s):(std)**:** UNION CARBIDE CORP ; YUNION KARBID KORPOPEJSHN FA ; UNION CARBIDE CO ; UNION CARBIDE CORP US ; UNION CARBIDE CORP 270 PARK AVENUE NEW YORK NEW Y ; UNION CARBIDE NEW YORK CORP

Assignee(s): UNION CARBIDE CORP 270 PARK AVENUE NEW YORK NEW YO ; UNION CARBIDE CORP NEW YORK N Y V ST A ; UNION CARBIDE CORP 270 PARK AVENUE NEW YORK NEW YORK 10017 E U A ; YUNION KARBID KORPOPEJSHN FIRMA ; DELMED INC ; DELMED INC A CORP OF MASS ; GRAHAM JOHN R ; MANUFACTURRS HANOVER TRUST CO ; MANUFACTURRS HANOVER TRUST CO AGENT AS

Inventor(s):(std)**:** DZHON ROBERT GREKHEM CA ; GRAHAM J ; GRAHAM J R ; GRAHAM JOHN R ; GRAHAM JOHN ROBERT ; GREKHEM DZHON ROBERT ; JOHN ROBERT GRAHAM ; JRGRAHAM ; GRAHAN J

Inventor(s): GRAHAM JOHN ROBERT FLOSSMOOR ILL VSTA ; J R GRAHAM ; GRAHAM JOHN ROBERT FLOSSMOOR ILL V ST A

Agent(s): AE MULFORD

International class (IPC 8-9): A61J1/00 A61J1/05 A61M1/02 B65D27/08 B65D30/22 B65D33/00 G09F3/00 G09F3/02 G09F3/18 (Advanced/Invention);
A61J1/00 A61J1/05 B65D27/00 B65D30/22 B65D33/00 G09F3/02 G09F3/08 (Core/Invention)

International class (IPC 1-7): A61J1/00 A61K27/10 A61M1/02 A61M5/14 B65B25/00 B65C3/26 B65D27/04 B65D27/04 B65D27/08 B65D31/00 B65D31/12 B65D33/00 B65D33/04 B65D81/18 B65D85/00 B65D85/00 B65D85/50 B65D85/72 G09F3/00 G09F3/08 G09F3/18

CPC: Y10S128/24 A61J2205/30 A61J2205/50 A61J1/10 G09F3/18 G09F3/185

European class: A61J1/00T A61J1/10 G09F3/18 G09F3/18B

US class: 128/DIG.24 206/459 206/459.5 40/661 462/69 604/189 604/262 604/408

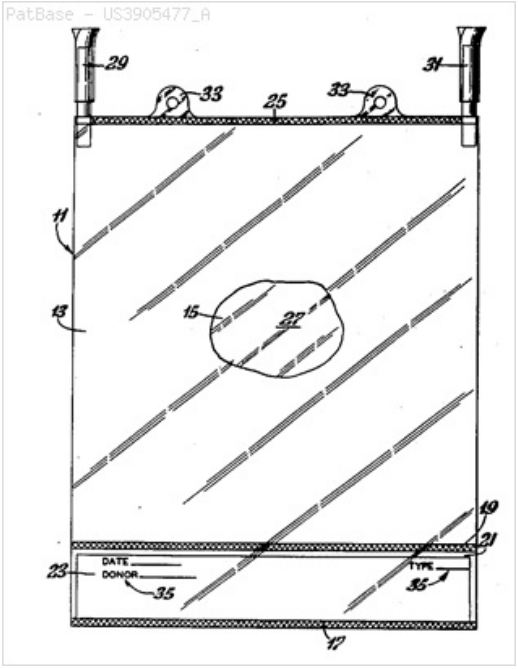
Classification Explorer

Cited documents: US3545671 A, US3380576 A, US3237970 A, US3209752 A, US2925675 A, US2896619 A, US2895475 A, US2796982 A, US2693189 A, FR1125333 A,

Forward Citations: WO9731609, WO9316591, WO9004076, WO11024112, USRE33924, USD629530, USD624662, USD621952, USD613419, USD602167, USD602166, US9468585, US8357116, US8002174, US6326188, US5507525, US5336195, US5314421, US5056930, US4981468, US4880425, US4804363, US4787222, US4781696, US4759494, US4690676, US4630448, US4588554, US4581013, US4526404, US4482342, US2012145580, US2009159714, US2006024818, GB2358386, GB2358386, GB2272197, GB2272197, GB2154982, FR2949195, EP2470147, EP0253651, EP0237973, CN102548522,

Abstract:
Source: US3905477A A transparent plastic film pouch for **packaging**, freezing, storing and transporting viable and perishable materials such as blood components is provided with a completely interiorly **sealed** tamperproof identification marking **label** having a pressure sensitive surface which is discernibly markable by pressures applied to the outer surface of the contiguous film.

PatBase - US3905477_A



405) Family number: 19201787 (US3910450A)

Title: BUNG DRUM MADE OF PLASTICS WITH ONE OR MORE BUNG **OPENINGS**

Priority: DE19722226217 19720530 DE19722262622 19721221 US19730362316 19730521 US19730419241 19731127

Family:

Publication number	Publication date	Application number	Application date
AT344070 B	19780710	AT19730004523	19730524
AT349969 B	19790510	AT19730005914	19730705
AT452373 A	19771015	AT19730004523	19730524
AT591473 A	19780915	AT19730005914	19730705
BE800254 A	19730917	BE19730131698	19730530
BE805073 A	19740116	BE19730135833	19730920
BR7303971 A0	19740725	BR19730003971	19730529
BR7307344 A0	19740815	BR19730007344	19730921
CA998343 A1	19761012	CA19730182363	19730928
CH554262 A	19740930	CH19730010489	19730718
CH557264 A	19741231	CH19730007212	19730521
DE2226217 A1	19731213	DE19722226217	19720530
DE2262622 A1	19740627	DE19722262622	19721221
ES217360 U	19761016	ES19730217360U	19730517
ES217360 Y	19770301	ES19730217360U	19730517
FR2186388 A1	19740111	FR19730019886	19730530
FR2186388 B1	19790112	FR19730019886	19730530
FR2211375 A1	19740719	FR19730029924	19730816
FR2211375 B1	19780519	FR19730029924	19730816
GB1430983 A	19760407	GB19730023067	19730515
GB1440939 A	19760630	GB19730031615	19730703
IT1051249 A	19810421	IT19730012727	19730712
IT986691 A	19750130	IT19730012626	19730518
JP49061261 A2	19740613	JP19730059907	19730530
JP49096886 A2	19740913	JP19730078918	19730714
JP4996886 A2	19740913	JP19730078918	19730714
MY8000133 A	19801231	MY19800000133	19801230
MY8100081 A	19811231	MY19810000081	19811230
NL7307317 A	19731204	NL19730007317	19730525
NL7309771 A	19740625	NL19730009771	19730713
NL7309771 A1	19740625	NL19730009771	19730713
SE398481 B	19771227	SE19730007650	19730529
SE398481 C	19780406	SE19730007650	19730529
SE401915 B	19780605	SE19730009592	19730706
SE401915 C	19780914	SE19730009592	19730706
US3910450 A	19751007	US19730419241	19731127
US3912110 A	19751014	US19730362316	19730521

Probable Assignee: GPG HOLDINGS LTD

Assignee(s):(std)**:** GPG HOLDINGS AND GPG INT LTD ; GPG HOLDINGS LIMITED AND GPG INT ; HAMMES WILHELM ; HAMMES WILHEM ; THERMO PLASTICS LTD ; GPG HOLDINGS LTD ; WILHELM HAMMES

Assignee(s): HAMMES W ; HAMMES WILHELM 5203 MUCH ; WILHEM HAMMES ; HAMMES WILHELM DT ; HAMMES WILHELM HAUPTSTRASSE 38 MUCH ALLEMAGNE ; GPG HOLDINGS LIMITED AND GPG INTERNATIONAL LIMITED ; GPG HOLDINGS LIMITED

Inventor(s):(std)**:** W HAMMES ; WHAMMES ; SOK ; HAMMES WILHELM ; HAMMES W

Inventor(s): HAMMES WILHELM 5203 MUCH

International class (IPC 8-9): B29C61/00 B29C65/00 B29C69/00 B65D1/12 B65D1/14 B65D1/16 B65D1/20 B65D1/46 B65D39/02 B65D39/04 B65D41/16 B65D45/00 B65D53/08 B65D8/18 B65D8/22 (Advanced/Invention);
B29C61/00 B29C65/00 B29C69/00 B65D1/00 B65D1/40 B65D39/00 B65D41/02 B65D45/00 B65D53/00 B65D8/04 (Core/Invention);
B29D B65D (Subclass/Invention)

International class (IPC 1-7): B29C27/12 B29D B65D1/12 B65D1/14 B65D1/20 B65D11/06 B65D11/22 B65D39/00 B65D39/04 B65D41/16 B65D41/16 B65D43/10 B65D45/00 B65D45/32 B65D53/08 B65D7/42 B65D8/02

CPC: B65D1/12 B65D39/04 Y10S220/29 B65D11/06

European class: B65D1/12 B65D11/06 B65D39/04 L29C66/71

US class: 220/610 220/613 220/614 220/67 220/789 220/DIG.29

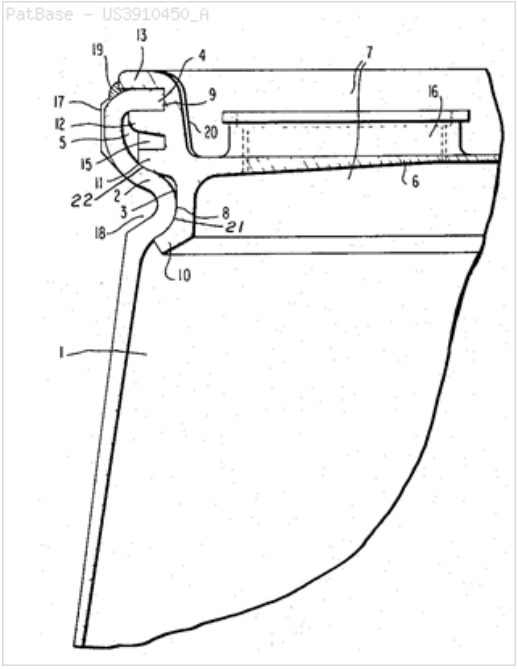
Classification Explorer

Cited documents: US3792797 A, US3780897 A, US3771681 A, US3770121 A, US3542913 A, US3531013 A, US3520441 A, US3458079 A, US3452897 A, US3441167 A, US3381872 A, US3327892 A, US3326421 A, US3159305 A, US2872060 A, US2674472 A,

Forward Citations: US9815676, US7565940, US6921089, US6845877, US6045000, US6019240, US5568876, US5385294, US5295603, US4887735, US4742932, US4709828, US4245753, US4201310, US4182475, US4043482, US4030850, US2015210524, US2015210523, US2015203342, US2009134160, US2007131051, US2004100039, JP61287554, GB2255307, GB2195973, GB2195973, EP0650898, DE4124434, DE4124434, DE20006095,

Abstract:
Source: US3910450A A plastic bung drum is provided with a mouth portion made integral with the body of the drum. The circumferential edge of the mouth portion is bent to form an inwardly projecting lip, while an intermediate section of the mouth is provided with an inwardly projecting circumferential bulge, forming a bead. A **closure** which fits into the mouth of the drum has its opposite edges bent to form outwardly extending circumferential lips, and is provided with a pair of intermediate circumferential flanges which, with the adjacent lips, form a groove at each end of the **closure**. These grooves engage the inwardly extending circumferential lip and bead on the drum. A peripheral weld is then made to produce a secure, substantially inseparable joint between the inwardly bent lip on the mouth of the drum and the corresponding lip on the **closure**.

PatBase - US3910450_A



406) Family number: 1286346 (US3807626A)

Title: GUSSETED PINCH BOTTOM BREAKAWAY POUCH **BAG**

Priority: US19720235908 19720320 US19740460497 19740412 US19750609521 19750902

Family:

Publication number	Publication date	Application number	Application date
AU197616241 A1	19780202	AU19760016241	19760726
AU498097 B2	19790208	AU19760016241	19760726
CA978906 A1	19751202	CA19720157607	19721127
DE2254640 A1	19731004	DE19722254640	19721108
DE2254640 B2	19770818	DE19722254640	19721108
DE2254640 C3	19780330	DE19722254640	19721108
DK132610 B	19760112	DK19730000338	19730122
DK132610 C	19760608	DK19730000338	19730122
FR2176968 A1	19731102	FR19730009999	19730320
FR2176968 B1	19770429	FR19730009999	19730320
GB1411759 A	19751029	GB19720056644	19721208
JP1109258 C3	19820813	JP19730029131	19730314
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JP49014270 A2	19740207	JP19730029131	19730314
JP52032770 A2	19770312	JP19760096593	19760812
JP56000303 B4	19810107	JP19730029131	19730314
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NL147377 B	19751015	NL19720014474	19721026
NL7214474 A	19730924	NL19720014474	19721026
NZ180589 A	19780306	NZ19760180589	19760412
US3807626 A	19740430	US19720235908	19720320
US3910488 A	19751007	US19740460497	19740412
US3958749 A	19760525	US19750609521	19750902

Probable Assignee: STONE CONTAINER CORP

Assignee(s):(std)**:** ST REGIS PAPER CO

Assignee(s): ST REGIS PAPER CO NEW YORK N Y V ST A ; ST REGIS PAPER CO US ; ST REGIS PAPER COMPANY ; ST REGIS PAPER COMPANY NEW YORK ; ST REGIS PAPER CY ; STONE CONTAINER CORP ; STONE BROWN PAPER INC ; ST REGIS PAPER CY US ; STONE BROWN PAPER INC A CORP OF ; STONE CONTAINER A DE CORP CORP ; CHAMPION INT ; CHAMPION INT CORP ; GOODRICH JOHN J

Inventor(s):(std)**:** GOODRICH J J ; GOODRICH JOHN J ; JIYON JIEI GUTSUDORITSUCHI ; GOODRICH J

Inventor(s): JOHN J GOODRICH ; JOHN JOSEPH GOODRICH ; SHON JEI GUTSUDORITSUCHI ; GOODRICH JOHN J PENSACOLA FLA V ST A ; GOODRICH J US

Agent(s): SF

International class (IPC 8-9): B65B51/10 B65D30/08 B65D33/00 B65D33/02 B65D33/22 B65D33/36 B65D75/38 B65D75/68 B65D77/04 (Advanced/Invention);
B65D30/08 B65D33/00 (Advanced/Non-invention);
B65B51/10 B65D30/08 B65D33/00 B65D33/02 B65D33/18 B65D33/36 B65D75/38 B65D75/52 B65D77/04 (Core/Invention)

International class (IPC 1-7): A47J47/02 B65B1/00 B65B51/10 B65B7/08 B65D27/00 B65D29/02 B65D30/08 B65D31/00 B65D31/02 B65D31/04 B65D31/10 B65D33/02 B65D33/16 B65D33/18 B65D33/22 B65D33/24 B65D33/36 B65D75/38 B65D77/04

CPC: B65D31/02 B65D75/68 B65D75/38 Y02W30/807

European class: B65D31/02 B65D75/38 B65D75/68

US class: 229/55 383/111 383/113 383/206 383/85

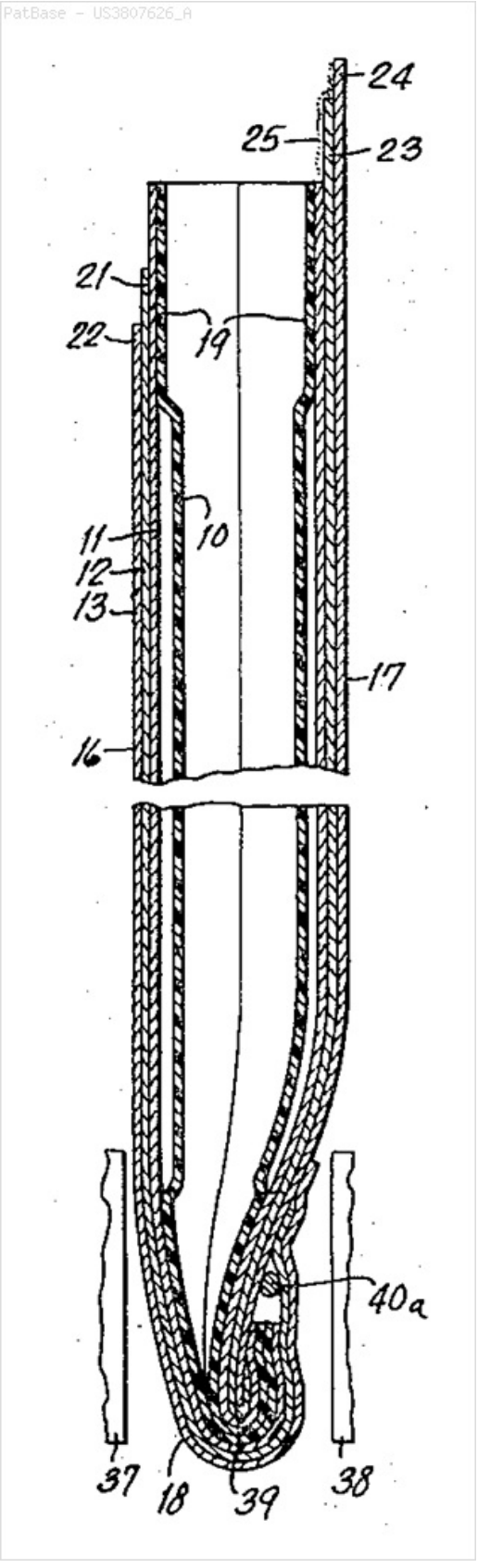
Classification Explorer

Cited documents: US3910488 A, US3807626 A, US3640381 A, US3485281 A, US3386604 A, US3291374 A, US3114643 A, US3038651 A, US2975955 A, US2631630 A, US2582286 A, FR1584491 A,

Forward Citations: WO9222474, WO8702646, WO8501252, WO17075069, WO16008017, WO12040097, WO12040097, WO12037012, WO05054079, WO03068618, WO0228724, WO0228724, WO0192111, US9522499, US9340328, US9233502, US9056697, US8858077, US8826959, US8753012, US8604399, US8579507, US8475046, US8443578, US8297840, US8282539, US8241193, US8240915, US7506487, US7406810, US7334682, US7163706, US7090904, US6994471, US6991375, US6986605, US6832464, US6715919, US6656403, US6599016, US6582161, US6436341, US6312742, US6202260, US5964161, US5762421, US5718514, US5644900, US5529396, US5492410, US5393143, US5310262, US5281027, US5172980, US5048692, US4971454, US4955981, US4946289, US4824261, US4790670, US4744466, US4681228, US4637063, US4567987, US4550442, US4550441, US4521910, US4498192, US4470153, US4428485, US4384914, US4289238, US4088264, US4065049, US3958749, US3945562, US3910488, US2016318666, US2014307986, US2013089277, US2013047555, US2013031875, US2012312478, US2012048860, US2011259917, US2011230323, US2011052106, US2011019944, US2010310195, US2010293897, US2010273377, US2010263332, US2010192520, US2010189380, US2010158418, US2010154362, US2007274614, US2007231516, US2007127855, US2007066470, US2007042146, US2007022716, US2006269173, US2006072859, US2006062496, US2005254731, US2005111765, US2005109652, US2005100252, US2004228547, US2004136616, US2004131731, US2004022462, US2004008908, US2003228078, US2003035598, JP61262744, JP61078811, JP6012344, JP55179140, JP54087909, JP53154110, JP53103412, JP53080718, JP53029873, JP52080714, JP51150918, JP2014517851, GB2467151, GB2467151, GB2157228, FR2617808, FR2612893, FR2383084, EP2769928, EP2676898, EP2570364, EP1535857, EP1284904, EP0290856, EP0190776, EP0123784, EP0112660, DE3344877, DE2722590, DE202013001694, DE102014206334, DE102010003978, DE102010003978, CN105416798, AU574161,

Abstract:
Source: US3807626A A multi-wall **bag** of tubular form comprising a plurality of plies of flexible sheet material laminated to one another and an innermost ply of heat **sealable** plastic material loosely bonded to the contiguous ply for manual detachment therefrom, said **bag** having a pair of oppositely disposed gussets interposed between oppositely disposed surface portions, said plastic and contiguous plies being substantially flush cut at the opposite **bag** ends, at least the outermost of the remaining plies being stepped in both directions from said plastic and contiguous plies at the **bag** ends to provide overlap portions with respect thereto, said overlap portions being coated with a thermoplastic adhesive, said plastic ply being heat **sealed** transversely of said tube at one **bag** end, and the overlap portion at said end being folded over and adhesively bonded to the opposite **bag** surface.
11 Claims, 19 Drawing Figures

PatBase - US3807626_A



407) Family number: 3829652 (US3761013A)

© PatBase

Title: DOUBLE WALL **PACKAGE** FOR STORING ITEMS IN BACTERIA-FREE CONDITION

Priority: US19720236409 19720320

Family:

Publication number	Publication date	Application number	Application date
GB1373467 A	19741113	GB19730012126	19730313
US3761013 A	19730925	US19720236409	19720320

Probable Assignee: SCHUSTER S J

Assignee(s):(std)**:** SCHUSTER S ; SCHUSTER S J

Assignee(s): SCHUSTER S US

Inventor(s):(std)**:** SCHUSTER S

Inventor(s): SCHUSTER S US

International class (IPC 8-9): A61B19/02 B65D33/24 (Advanced/Invention); A61B19/04 A61F15/00 A61M5/00 (Advanced/Non-invention); A61B19/00 B65D33/16 (Core/Invention); A61F15/00 A61M5/00 (Core/Non-invention)

International class (IPC 1-7): A61L3/02 B65D33/00 B65D33/16

CPC: A61B42/40 A61B50/30 A61B50/3001 A61B2050/314 A61B2050/316 A61M25/002 A61F15/001 A61M5/002 A61M2209/06 B65D33/24

European class: A61B19/02P A61M25/00P B65D33/24 K61B19/02P2 K61B19/02P5 K61B19/02P5D K61B19/04P K61F15/00B K61M209/06 K61M5/00P

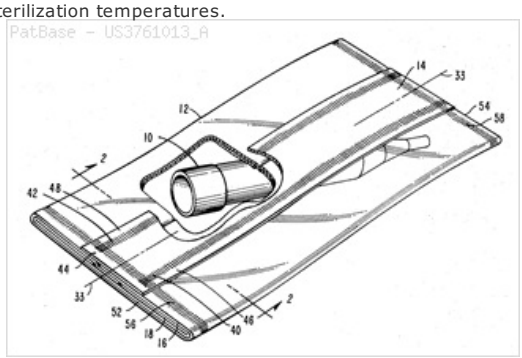
US class: 206/439 229/6.2 383/109 383/210 383/66

Classification Explorer

Cited documents: US3491753 A, US3472369 A, US3338019 A, US3327925 A,

Forward Citations: WO9501135, WO12079590, WO11026930, WO03028565, USRE36132, USRE36071, USRE33880, USD811211, USD811210, US9840065, US9775551, US9718253, US9649471, US9511204, US9346612, US9295417, US9205222, US9144659, US9120608, US9119578, US9113836, US9041541, US9033898, US9016555, US8808202, US8567660, US8459455, US8182152, US8101134, US8075188, US7922983, US7631760, US7361317, US7217033, US7153469, US6996952, US6793879, US6630104, US6517916, US6502697, US6406764, US6406674, US6279297, US6251489, US6213642, US6189694, US6159423, US6117505, US6073767, US5996799, US5958337, US5947287, US5897210, US5843049, US5688476, US5653090, US5635134, US5590777, US5551781, US5509255, US5474637, US5459978, US5358791, US5257692, US5253754, US5100003, US4972404, US4917247, US4790670, US4778058, US4724961, US4644586, US4550831, US4367816, US4228900, US4203520, US4057144, US4022324, US4018222, US3990872, US3946780, US3930580, US2016046400, US2015359994, US2015001107, US2014270583, US2014133785, US2013327664, US2013161208, US2013111852, US2012016308, US2011139650, US2011127188, US2011079535, US2011056852, US2010051495, US2009200198, US2007026472, US2006153759, US2006104857, US2005252176, US2005067312, US2005008527, US2004076564, US2004074593, RU2602717, JP6075925, JP2015502777, GB2131384, FR2859378, FR2542287, EP2292293, EP2057957, EP1621154, EP1621154, EP1621154, EP1514524, EP1362557, EP1125558, EP0707460, EP0656862, EP0656862, DE202010010331, CN103260688, CN102700808, CN102573978, AU758905, AU2010291225,

Abstract:
Source: US3761013A A **package** is disclosed comprising a double wall, plastic **bag** having an access **opening** **covered** by a readily removable **closure** membrane bonded to the **bag** by heat **seals** adjacent the access **opening**. Both the **bag** and the membrane are essentially completely impermeable to bacteria, but the membrane is highly permeable to sterilizing vapor in comparison to the plastic **bag**. The **bag** comprises inner and outer plies, portions of which define the access **opening**, and other portions of which overlap within the confines of the access **opening**. Along any transverse section of the **bag**, the combined thickness of the inner and outer plies is essentially the same, thereby facilitating the fabrication of the **bag** out of high temperature plastic, such as polypropylene, which can withstand steam sterilization temperatures.



408) Family number: 2018518 (US3765309A)

Title:	**BAG** BOTTOM CONSTRUCTION
Priority:	DE19732344815 19730905 FR19730031783 19730903 US19710172049 19710816

Family:

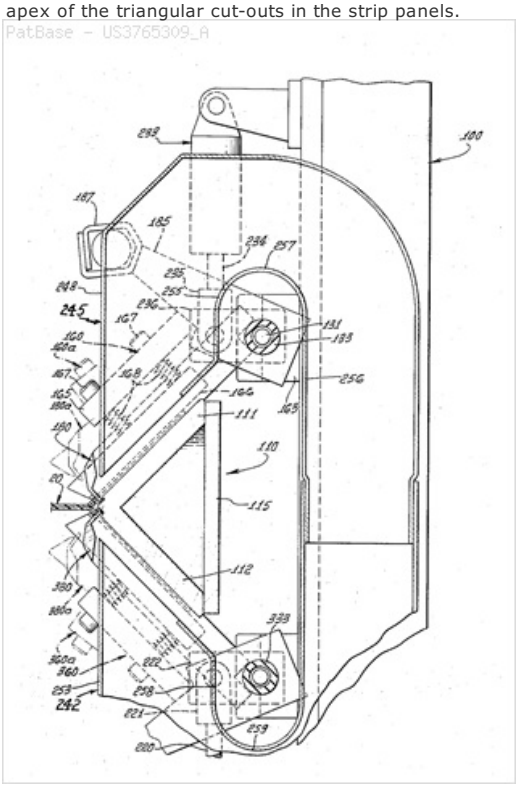
Publication number	Publication date	Application number	Application date
BE804437 A	19740102	BE19730135300	19730904
CA973001 A1	19750819	CA19720149455	19720815
DE2344815 A1	19750313	DE19732344815	19730905
FR2242860 A5	19750328	FR19730031783	19730903
GB1405436 A	19750910	GB19720037951	19720815
US3765309 A	19731016	US19710172049	19710816

Probable Assignee:	UNIVERSAL MACHINERY CORP
Assignee(s):(std)**:**	JOICE RICHARD L ; JOICE RICHARD ; JOICE R L ; JOICE RICHARD LEE ; UNIVERSAL MACHINERY CORP
Assignee(s):	JOICE RICHARD US ; UNIVERSAL MACHINERY CORP US ; JOICE RICHARD L 19812 LASSEN STREET CHATSWORTH CALIFORNIE E U A ; FMC A CORP OF DE CORP ; FMC CORP
Inventor(s):(std)**:**	JOICE R ; JOICE RICHARD L ; JOICE RICHARD LEE
Inventor(s):	LEE JOICE RICHARD ; JOICE R US
International class (IPC 8-9):	B29C65/00 B31B1/64 B31B19/64 B31B37/00 B31B49/04 (Advanced/Invention); B29C65/00 B31B1/60 B31B19/00 B31B37/00 B31B49/00 (Core/Invention)
International class (IPC 1-7):	B26F3/08 B29C27/02 B31B1/22 B31B1/64 B31B29/74 B31B35/00 B31B49/04 B65D85/36
CPC:	B29C66/4312 B29C66/004 B29C65/02 B31B70/642 B31B2155/00 B31B2160/20 B29C66/1122 B31B70/00 B31B2160/10
European class:	B29C66/004 B31B19/64 B31B37/00 L31B219/60C1 L31B237/20
US class:	493/190 493/196 493/203 493/237 493/244 493/342 93/3.5SB

Classification Explorer

Cited documents:	US3646856 A, US3599538 A, US3537360 A, US3460441 A, US3395622 A, US3054441 A, US3023679 A, US2606850 A,
Forward Citations:	US6328683, US6077208, US5181365, US2016272349, EP0215163, CN104149389, CN102442438,

Abstract:
Source: US3765309A A machine and method for forming a single thickness bottom in a **bag** of heat-**sealable** sheet material such as polyethylene film from a folded strip of such material of indefinite length, the folded edge having an inwardly folded gusset therein forming a pair of double thickness marginal panel portions. The machine includes an anvil having longitudinally extending faces lying in planes symmetrically inclined above and below a central horizontal plane, each anvil face having a groove formed therein in the shape of two legs of an isosceles right triangle whose altitude lies in a vertical plane perpendicular to the direction of strip movement. During strip movement the panel portions are folded apart and are drawn along the anvil faces. The strip is momentarily stopped, and clamping means immediately upstream and downstream of the anvil grooves tightly retain the panels stationary on the anvil, with portions bridging the grooves. A pair of electrically heated cutting and **sealing** knives, each having an edge registering with one of the anvil grooves but of narrower width than the groove, are brought into **sealing** and cutting relation with the strip panel portions which bridge the grooves, **sealing** the perpendicular strip panel edges and cutting triangular chips from the panels. Upper and lower vacuum hoods immediately inwardly of the grooves communicate with a vacuum source for removal and disposal of the chips. The anvil is cooled to minimize film build-up, desirably by circulating cooling water through its hollow interior. After chip removal the vacuum supply is interrupted, the knives and clamping means are retracted, and the strip is then indexed downstream, with means being provided to support the strip panels in a common plane with the remaining portion of the strip. Individual **bags** are formed from the strip downstream of the present machine by conventional **sealing** and cutting transversely of the strip intersecting the apex of the triangular cut-outs in the strip panels.



409) Family number: 1116583 (US3858380A)

Title:	DEVICE FOR WRAPPING VERTICALLY PILED COINS OR THE LIKE IN **BAGS** MANUFACTURING OUT OF A SHRINK FILM
Priority:	DE19722219490 19720418

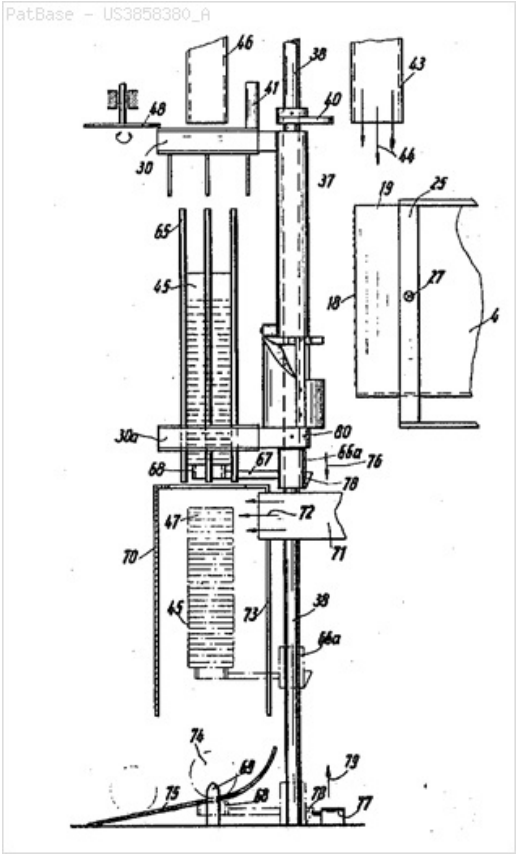
Family:

Publication number	Publication date	Application number	Application date
DE2219490 A1	19731031	DE19722219490	19720418
DE2219490 B2	19750227	DE19722219490	19720418
DE2219490 C3	19751023	DE19722219490	19720418
FR2180873 A1	19731130	FR19730013826	19730417
FR2180873 B3	19760402	FR19730013826	19730417
GB1357518 A	19740626	GB19730018537	19730417
IT982629 A	19741021	IT19730022115	19730306
US3858380 A	19750107	US19730348022	19730405

Probable Assignee:	ZIMMERMANN AND CO F
Assignee(s):(std)**:**	ZIMMERMANN AND CO ; ZIMMERMANN AND CO F ; F ZIMMERMAN AND CO FA
Assignee(s):	F ZIMMERMANN AND CO 1000 BERLIN ; FIRMA F ZIMMERMAN AND CO ; ZIMMERMANN ET CO DT ; ZIMMERMANN CO F ; ZIMMERMANN ET CO ; ZIMMERMANN F UND CO ; ZIMMERMANN F U CO
Inventor(s):(std)**:**	SCHMECHEL WERNER
Inventor(s):	SCHMECHEL WERNER 1000 BERLIN
International class (IPC 8-9):	B65B5/02 G07D9/06 (Advanced/Invention); B65B5/00 G07D9/06 (Core/Invention)
International class (IPC 1-7):	B65B11/00 B65B11/10 B65B25/00 B65B43/04 B65B43/36 B65B5/02 B65B53/06 B65B57/02 B65B9/08 B65D3/10 G07D9/00
CPC:	B29C66/431 G07D9/065 B29C66/8244 B65B5/02 B29C66/73715 B29C65/18 B29C65/30 B29C66/1122
European class:	B29C66/8244 B65B5/02 G07D9/06B
US class:	53/385.1 53/52 53/557 53/562 53/570
Classification Explorer	
Cited documents:	US3513622 A, US3492783 A, US3457695 A, US3230687 A,
Forward Citations:	WO9421520, WO05061334, US9126705, US8776486, US5456059, US5414978, US4601156, US4470241, US2014196405, US2011185687, GB2469814, GB2469814, FR2560855, EP1431186, EP0156713, DE4141830, DE10322019, DE10322019,

Abstract:
Source: US3858380A A method of wrapping uniformly shaped flat pieces, such as coins, piled up in columns, in a shrink film **covering**, comprises the operational steps of feeding a film band longitudinally folded in half and with the fold being below and the height of the folded band corresponding approximately to the height of the pile of pieces to be wrapped, intermittently heat-**sealing** and/or perforating the folded film band along vertical lines at distances corresponding to the diameter of the pile of pieces to be wrapped so as to form individual **bags**, consecutively blowing up each **bag** to **open** it, introducing into the **open** **bag** a bundle of pins adapted to be spread apart so as to hold the **bag** fast and **open**, tearing the **bag** off along the perforation to separate it from the remaining **bags**, transporting the **open** **bag** under the prepared pile, dropping the pile in vertical position into the **bag**, slowly lowering the **bag** containing the pile still in vertical position while it is subjected to a current of hot air to cause the film to shrink and to tightly engage the pile. The device for carrying out the method includes **bag** forming means in the form of heat-**sealing** and perforating equipment to form the **bag** side **closures**. Each **bag** is **opened** by a blower and is engaged after **opening** by a **bag** spreading and transporting mechanism. The **opened** **bags** are transported by the spreading and transporting mechanism to a location below a vertical stack of the articles and a selected quantity of the articles is dropped into each **opened** **bag** in succession. The filled **bags** are moved by means of a lowering mechanism through a heating chamber to cause the **bag** film material to tightly engage the articles while they are held in a vertical orientation.

PatBase - US3858380_A



410) Family number: 1073938 (US3770155A)

Title:	DUALLY **SEALABLE**, NON-LEAKING VIAL FOR SHIPPING RADIOACTIVE MATERIALS
Priority:	US19710190490 19711019 US19720297791 19721016 US19720297810 19721016

Family:

Publication number	Publication date	Application number	Application date
CA960180 A1	19741231	CA19720152596	19720925
US3770155 A	19731106	US19710190490	19711019
US3811591 A	19740521	US19720297810	19721016
US3826059 A	19740730	US19720297791	19721016

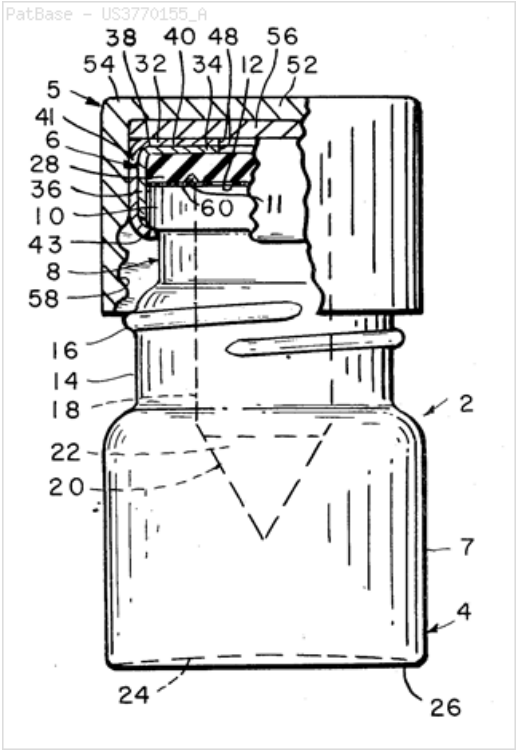
Probable Assignee:	EI DU PONT DE NEMOURS AND CO INC
Assignee(s):(std):	NEW ENGLAND NUCLEAR CORP
Assignee(s):	NEW ENGLAND NUCLEAR CORP US ; NOVITCH HOWARD ; EI DU PONT DE NEMOURS AND CO INC
Inventor(s):(std):	NOVITCH HOWARD ; NOVITCH H
Inventor(s):	NOVITCH H US
International class (IPC 8-9):	B65B53/00 B65D51/00 B65D51/22 B65D55/08 (Advanced/Invention); B65B53/00 B65D51/00 B65D51/18 B65D55/02 (Core/Invention)
International class (IPC 1-7):	B65B29/00 B65B3/04 B65B53/00 B65D51/22 B65D65/28 B65D85/70
CPC:	B65B53/00 Y10S215/03 B65D55/0854 B65D51/002
European class:	B65B53/00 B65D51/00B B65D55/08B3
US class:	215/12.2 215/246 215/247 215/3.7R 215/329 215/DIG.3 53/27 53/412 53/426 53/442 53/449

Classification Explorer

Cited documents:	US3733002 A, US3424329 A, US3088830 A, US2790285 A, US2734649 A, US2364126 A, US2328845 A, US2236491 A,
Forward Citations:	WO14151563, WO08153580, WO08026917, WO06019292, USD598124, USD574605, USD561908, USD533670, USD522663, USD505494, USD445690, US9902542, US9757306, US9731875, US9731082, US9725228, US9668914, US9637251, US9630755, US9549874, US9463138, US9377338, US9327886, US9296498, US9233776, US9051064, US8960242, US8919614, US8757436, US8672195, US8631838, US8627861, US8448674, US8413854, US8347923, US8272411, US8240521, US8220507, US7992597, US7980276, US7967034, US7905257, US7886937, US7861750, US7810529, US7798185, US7779609, US7726357, US7726352, US7644842, US7568509, US7556066, US7500498, US7490639, US7445033, US7430842, US7328729, US7290573, US7264142, US7243689, US7225598, US7186241, US7111649, US7100646, US7077176, US7051906, US7032631, US7000806, US6997219, US6929040, US6880580, US6756008, US6605076, US6569125, US6447498, US6296129, US6261266, US6260722, US6257432, US6217568, US6213996, US6193697, US6065270, US5931323, US5871500, US5797897, US5776125, US5658260, US5397902, US5383558, US5226281, US5211638, US5188620, US5000804, US4919888, US4890944, US4788438, US4746017, US4719740, US4706839, US4678083, US4544073, US4074824, US3923062, US2017297797, US2016325895, US2016114963, US2015296882, US2015144586, US2014263319, US2012211503, US2012029438, US2010326868, US2010276035, US2010236659, US2010236193, US2009308485, US2009297442, US2009229702, US2008308444, US2008308443, US2008197145, US2008135130, US2008072996, US2008066824, US2008019863, US2007156102, US2007084524, US2007079896, US2007000573, US2006191594, US2006131338, US2006124197, US2006037287, US2005263543, US2005178462, US2005173020, US2005023173, US2005000591, US2004256026, US2004245289, US2004221905, US2004173613, US2004141886, US2004118802, US2004060261, US2003088216, US2002020713, TWI339176, NL1027179, JP6165725, JP2014527423, GB2233967, EP2014570, EP1122185, EP0587983, EP0383262, EP0383262, EP0071290, AU2005273092,

Abstract:
Source: US3770155A A dually **sealable**, non-leaking vial for shipping liquid radioactive materials, particularly sterile radioactive materials, and other sterile liquid materials in which the mouth of the vial, as shipped, is **sealed** by a needle pierceable septum **seal** and in which a threaded cap is located and held over the septum **seal** and mouth with the threads thereby held out of engagement with mating threads on the vial by the septum **seal**. However, upon removal of the septum **seal** after shipment, the threads of the cap mate with the threads of the vial whereby the cap can be removabley threaded tightly over the mouth to **seal** it.

PatBase - US3770155_A



411) Family number: 1067024 (US3807118A)

Title:	METHOD OF FORMING A **PACKAGE**
Priority:	US19720240207 19720331

Family:

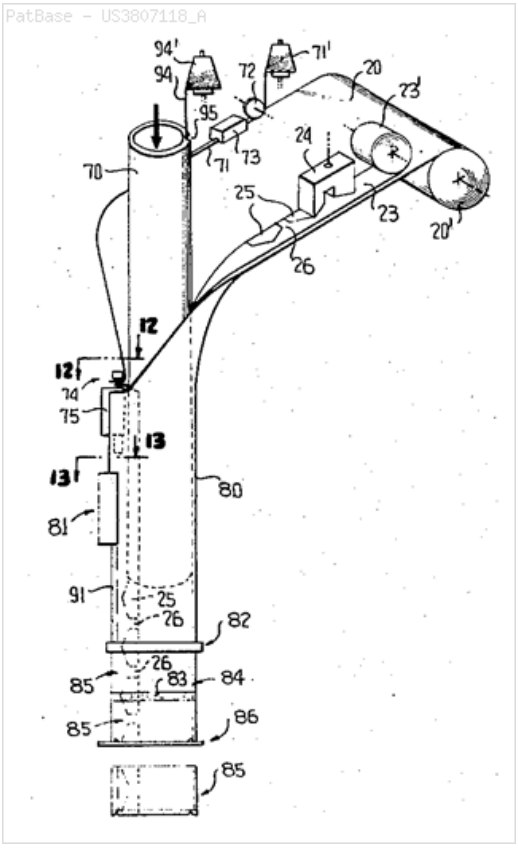
Publication number	Publication date	Application number	Application date
CA1022889 A1	19771220	CA19730166895	19730323
FR2178938 A1	19731116	FR19730011497	19730330
FR2178938 B3	19760326	FR19730011497	19730330
GB1428023 A	19760317	GB19730015359	19730330
US3807118 A	19740430	US19720240207	19720331

Probable Assignee:	RODGERS V
Assignee(s):(std):	SCHNEIDER W ; SCHNEIDER C ; RODGERS V ; PIKE B R ; PIKE BRIAN ; SCHNEIDER W S ; SCHNEIDER WILLIAM S
Assignee(s):	SCHNEIDER WILLI ; PIKE BRIAN R ; PIKE BRIAN US ; SCHNEIDER W US ; SCHNEIDER C US ; RODGERS V US ; BRIAN R PIKE
Inventor(s):(std):	PIKE B ; PIKE BRIAN R
Inventor(s):	PIKE B US
International class (IPC 8-9):	B31B19/84 B65B61/18 B65B9/08 B65B9/10 B65D30/24 (Advanced/Invention); B31B19/00 B65B61/18 B65B9/06 B65B9/10 B65D30/24 (Core/Invention)
International class (IPC 1-7):	B31B1/84 B65B61/18 B65B9/08 B65B9/10 B65D31/02 B65D31/14 B65D33/16 B65D75/40 B65D75/48 B65D75/66
CPC:	B65D31/14 B31B70/85
European class:	B31B19/84 B65D31/14 L31B219/90J4
US class:	383/206 383/44 383/61.1 493/196 493/212 53/1.4 53/410 53/412 53/450 53/451 53/452

Classification Explorer

Cited documents:	US3596428 A, US3279330 A, US3210907 A, US2984958 A,
Forward Citations:	WO8604546, WO04048077, USRE34905, USD468195, US9272480, US8523437, US7320545, US7249612, US7165887, US7086782, US6959523, US6913387, US6910806, US6904646, US6886982, US6869387, US6868650, US6622459, US6588177, US6553744, US6375037, US6360513, US6260336, US6224528, US6126318, US6047521, US6036004, US6029428, US5971613, US5967308, US5882120, US5792213, US5768852, US5746043, US5709479, US5604959, US5557907, US5546732, US5513479, US5228268, US5127208, US5052554, US5046300, US4919740, US4729205, US4727709, US4709533, US4696302, US4693365, US4655028, US4653250, US4384440, US4355494, US4174597, US2013023394, US2008253696, US2007006443, US2005109411, US2004052435, US2004050019, US2004040258, US2003113415, US2003096042, US2003072852, US2003054928, US2001017947, JP4160051, JP2004048077, GB2492632, EP1462364, AU594206,

Abstract:
Source: US3807118A This relates to a **package** which is primarily intended to have a first product incorporated therein in the forming of the **container** portion of the **package**, with the **container** including a valved passage through which a second product may be added to the **package**. The **package** is formed with two walls and is of a construction wherein it may be formed on a continuous basis utilizing major web material, which defines the two walls of the **packages**, and minor web portions. The **package** forming operation may be either a horizontal operation or a vertical operation. The minor web portions are first **sealed** to one of the walls to define a plurality of adjacent valved passages, after which the two wall portions are superimposed with respect to valve passages and said minor web portions disposed therebetween, followed by formation of transverse **seals** to define **packages** each having a valved passage at one end thereof.



412) Family number: 1045717 (US3884386A)

Title: DEVICE FOR AUTOMATICALLY SUPPLYING DRINKS AND FOODSTUFF

Priority: ES19720405376 19720729 ES19730411197 19730202

Family:

Publication number	Publication date	Application number	Application date
AT330000 B	19760610	AT19730006686	19730730
AT668673 A	19750815	AT19730006686	19730730
BE802988 A	19731116	BE19730134035	19730730
CA1002010 A1	19761221	CA19730177482	19730727
CH567308 A	19750930	CH19730011058	19730730
DE2338551 A1	19740207	DE19732338551	19730730
ES405376 A1	19760901	ES19720405376	19720729
ES411197 A1	19770301	ES19730411197	19730202
FR2195011 A1	19740301	FR19730027688	19730727
FR2195011 B1	19770916	FR19730027688	19730727
GB1438823 A	19760609	GB19730036233	19730730
IT995087 A	19751110	IT19730027243	19730727
JP49054100 A2	19740525	JP19730086301	19730730
NL160409 B	19790515	NL19730010491	19730727
NL160409 C	19791015	NL19730010491	19730727
NL7310491 A	19740131	NL19730010491	19730727
NL7310491 A1	19740131	NL19730010491	19730727
RO82135 B	19830730	RO19730075853	19730820
RO82135 B1	19830730	RO19730075853	19730820
RO82135 P	19830803	RO19730075853	19730820
US3884386 A	19750520	US19730383149	19730727

Probable Assignee: ARIN URCOLA

Assignee(s):(std)**:** ARIN URCOLA ; ELECTROTECNICA MELIA S A ; URCOLA FRANCISCO ARIN ; ELECTROTECNICA MELIA SA ; MELIA ELECTROTECNICA SA ; YURRAMENDI EGUIZABAL JOSE M ; ELECTROTECNICA MELIA ; ELECTROTECNICA MELIA EMESA SA ; ELECTROTECNICA MELIA SA EMESA

Assignee(s): ELECTROTECNICA MELIA S A EMESA ; ELECTROTECNICA MELIA S A EMESA PRINCESA 25 MADRID ESPAGNE ; ELECTROTECNICA MELIA ES ; ELECTROTECNICA MELIA S A EMESA PRINCESA 25 MADR ; ELECTROTECNICA MELIA S A EMESA MADRID ; ELECTROTECNICA MELIA EMESA PRINCESA 25 MADRID ESPAGNE SA ; ELECTROTECNICA MELIA EMESA MADRID SA ; EGUIZABAL JOSE MIGUEL YURRAMENDI ; ELECTROTECNIA MELIA S A ES ; ELECTROTECNIA MELIA SA

Inventor(s):(std)**:** ARIN URCOLA FRANCISCO ; EGUIABAL JOSE M Y ; EGUIZABAL JOSE MIGUEL YURRAMEN ; URCOLA FRANCISCO A ; URCOLA FRANCISCO ARIN

Inventor(s): YURRAMEND EGUIZABAL JOSE MIGUEL ; URCOLA FRANCISCO A ES ; EGUIZABAL JOSE MIGUEL YURRAMENDI ; EGUIABAL JOSE M Y ES

International class (IPC 8-9): A47F3/02 G07F11/00 G07F5/18 G07F7/00 G07F7/02 G07F9/00 G07F9/10 (Advanced/Invention); A47F3/00 G07F11/00 G07F5/00 G07F7/00 G07F9/00 G07F9/10 (Core/Invention); B65B (Subclass/Invention)

International class (IPC 1-7): A23L1/16 A47F1/00 A47F3/02 A47G B65B G07C G07F11/00 G07F11/44 G07F7/00 G07F7/02 G07F9/10 G07G

CPC: Y10S194/906 G07F7/02 G07F9/105 G07F11/002 G06Q20/342 G07F5/18 G07F7/00 G07F7/025 G07F9/10 G07F17/0071

European class: G06Q20/342 G07F11/00B G07F17/00F2 G07F5/18 G07F7/00 G07F7/02 G07F7/02E G07F9/10

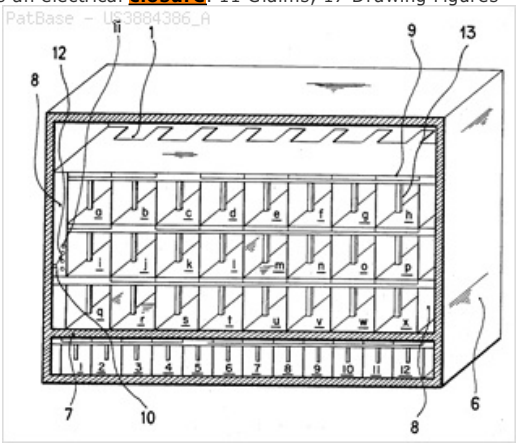
US class: 194/906 221/150R 221/21 221/7 312/234 377/13

Classification Explorer

Cited documents: US3749279 A, US3500649 A, US3310198 A, US3160720 A, US1309911 A, US1152638 A, NL7212440 A, FR1599367 A, FR1471922 A, DE2050469 A1,

Forward Citations: WO12046205, WO12046203, WO0155985, USD728282, USD697740, US9694488, US9656383, US9406187, US8893922, US8794014, US7418311, US6349244, US6259965, US6204763, US6131399, US5520941, US5236103, US5133441, US4893705, US4891755, US4884721, US4629090, US4411351, US4075463, US4007853, US2013200014, US2012200385, US2011301749, US2010258581, US2009293501, US2008234859, US2007083288, GB2135292, FR2537413, EP1492062, EP0877343, EP0340420, EP0250379, EP0250379, EP0249974, DE2627782, CH675645,

Abstract:
Source: US3884386A Device for automatically supplying or **dispensing** drinks and food stuffs includes a cabinet having a cooling zone, a zone for containing drinks and foodstuffs, a zone for registering consumptions and a zone for generating cooling energy. The cabinet is conveniently provided with a mechanical **closure** as well as an electrical **closure**. 11 Claims, 17 Drawing Figures



413) Family number: 7522472 (US3772712A)

Title:	DRY CLOSET
Priority:	US19710176914 19710901

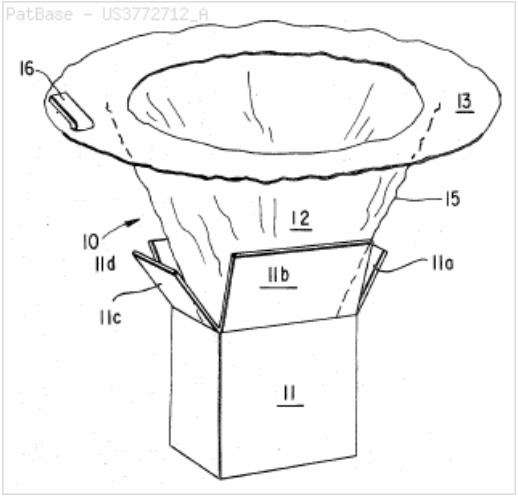
Family:

Publication number	Publication date	Application number	Application date
US3772712 A	19731120	US19710176914	19710901

Probable Assignee:	OWENS C
Assignee(s):(std):	OWENS C ; POTTBERG R ; RENN C
Assignee(s):	RENN C US ; POTTBERG R US ; OWENS C US
Inventor(s):(std):	RENN C ; POTTBERG R ; OWENS C
Inventor(s):	RENN C US ; OWENS C US ; POTTBERG R US
International class (IPC 8-9):	A47K11/02 (Advanced/Invention); A47K11/00 (Core/Invention)
International class (IPC 1-7):	A47K11/02
CPC:	Y02A50/454 A47K11/02
European class:	A47K11/02
US class:	4/14.2 4/142 4/484
Classification Explorer	
Cited documents:	US3422985 A, US3405409 A, US3381315 A, US3329974 A, US2315390 A, US2110956 A, US1615775 A,
Forward Citations:	WO17184409, WO08105702, USD639004, USD639003, USD639002, USD619905, US9714138, US9545348, US9084703, US8833592, US8739501, US8690017, US8647587, US8635838, US8567157, US8215089, US8127519, US7101357, US6783826, US6713140, US6565801, US6296134, US5174462, US5040249, US4979242, US4710989, US2016008196, US2011104022, US2011100996, US2011100995, US2011099958, US2011099957, US2011099956, US2011099950, US2011099945, US2011099944, US2010050334, US2010006712, US2008257806, US2007107116, US2004004111, US2003150050, US2003116575, JP2010519980, FR2629331, EP0396031, DE3941304, DE19625980, CH678916,

Abstract:

Source: US3772712A A dry closet comprises a vessel having an **open** top and provided with a seat member adjacent the **open** top. A receptacle holding member is positioned within the vessel and includes a lower **container** receiving portion and an upper, foraminous, portion. A disposable receptacle is positioned on the holding member prior to use. The receptacle includes a **container** portion, preferably in the form of a closeable **box**, and a **bag** portion much larger in volume than the **box** when extended upwards of the **box** in unfolded condition. The **bag** is closed at the bottom and **open** at its top and is secured at its lower end within the **box** and forms a water tight receptacle **bag** within the vessel. A rim portion at the upper, **open**, end of the **bag** is placeable over the upper surface of the seat portion at the top of the vessel. The receptacle holding member and receptacle thus divided the vessel into a first, closed, chamber comprising the space between the vessel walls and the receptacle holding member aNd a second chamber having an **open** top comprising the space within the receptacle holding member. With the receptacle in place, vacuum is applied to the first chamber thus causing the receptacle to be held in place against the foraminous upper portion of the receptacle holding member. During use, the second chamber is ventilated, utilizing a vacuum source. After use, the top area of the **bag** is folded together and evacuated using the ventilation vacuum source, such that the walls collapse without entraining air in the **bag**. The **bag** is then rolled down on itself until it is within the **box** **container**. The **box** **container** is then closed and **sealed** and stored for subsequent disposal. The individual closed boxes are preferably stored in larger carriers capable of carrying several used boxes to a disposal site. The invention is particularly suited to marine use since no waste products are discharged overboard and since pumping-out facilities, necessary for use with holding tank devices, are not required ashore.



414) Family number: 3790934 (US3774762A)

© PatBase

Title: ANALOGUE FLUID FLOW PROGRAMMING STRUCTURES

Priority:

AU19740073005 19740905	CH19740012103 19740905	GB19740039035 19740906
IE19740001772 19740826	US19710108118 19710120	US19710157942 19710629
US19790034539 19790430	US19780915472 19780614	US19760670608 19760326
US19750625738 19751024	US19740494006 19740731	US19810222772 19810106
US19730395214 19730907	US19760570608 19760326	WO1980US00537 19800429

Family:

Publication number	Publication date	Application number	Application date
AU197473005 A1	19760311	AU19740073005	19740905
AU198059993 A1	19801120	AU19800059993	19800429
AU5999380 A1	19801120	AU19800059993D	19800429
BE819642 A	19741231	BE19740148293	19740906
CA1034459 A1	19780711	CA19740208635	19740906
CH594418 A	19780113	CH19740012103	19740905
CH612587 A	19790815	CH19770009014	19740905
DE2442086 A1	19750320	DE19742442086	19740903
DE3068781 D1	19840906	DE19803068781	19800429
EP0027470 A1	19810429	EP19800901107	19801117
EP0027470 A4	19810901	EP19800901107	19801117
EP0027470 B1	19840801	EP19800901107	19801117
ES429812 A1	19760901	ES19740429812	19740906
FR2242994 A1	19750404	FR19740029917	19740903
FR2242994 B1	19801212	FR19740029917	19740903
GB1492386 A	19771116	GB19740039035	19740906
GB1492387 A	19771116	GB19760053525	19740906
IE40006 B	19790214	IE19740001772	19740826
IE40006 L	19750307	IE19740001772	19740826
IE40007 B	19790214	IE19780000179	19740826
IE40007 L	19750307	IE19780000179	19740826
IL49953 A0	19760930	IL19760049953	19760701
IL49953 A1	19800731	IL19760049953	19760701
IL59959 A0	19800630	IL19800059959	19800430
IL59959 A1	19810630	IL19770059959	19771111
JP50072494 A2	19750616	JP19740102527	19740907
JP56500993 T2	19810723	JP19800501287T	19800429
SE7411321 A	19750310	SE19740011321	19740906
SE7411321 L	19750310	SE19740011321	19740906
SE8200621 A	19820203	SE19820000621	19820203
SE8200621 L	19820203	SE19820000621	19820203
US3774762 A	19731127	US19710108118	19710120
US3912455 A	19751014	US19730395214	19730907
US3946731 A	19760330	US19740494006	19740731
US4370983 A	19830201	US19790034539	19790430
US4464172 A	19840807	US19810222772	19810106
WO8002376 A1	19801113	WO1980US00537	19800429
ZA7405558 A	19751029	ZA19740005558	19740830

Probable Assignee: LICHTENSTEIN E S

Assignee(s):(std)**:** ELMAR MEDICAL SYSTEMS LTD ; LICHTENSTEIN E ; LICHTENSTEIN E S ; LICHTENSTEIN ERIC ; LICHTENSTEIN ERIC STEFAN ; STEFAN LICHTENSTEIN

Assignee(s): LIOR ROSENBERG ; LICHTENSTEIN ES ; LICHTENSTEIN ERIC STEFAN GREENWICH CONN VSTA ; LICHTENSTEIN ERIC US ; LICHTENSTEIN ERIC S ; LICHTENSTEIN ERIC STEFAN GREENWICH CONN V ST A ; LICHTENSTEIN E US ; ERIC S LICHTENSTEIN ; ERIC STEFAN LICHTENSTEIN

Inventor(s):(std)**:** LICHTENSTEIN ERIC S ; LICHTENSTEIN E ; LICHTENSTEIN ERIC STEFAN

Inventor(s): E LICHTENSTEIN ; ERIC STEFAN LICHTENSTEIN ; LICHTENSTEIN ERIC STEFAN GREENWICH CONN V ST A ; LICHTENSTEIN E US ; LICHTENSTEIN ERIC STEFAN GREENWICH CONN VSTA

Agent(s): REINHOLD COHN AND PARTNERS; BENJAMIN J BARISH

Designated states: AU CH DE FR GB JP LI SE

International class (IPC 8-9): A61B5/00 A61B5/02 A61M1/00 A61M1/02 A61M1/10 A61M1/14 A61M1/16 A61M1/36 A61M3/02 A61M5/00 F04B43/06 (Advanced/Invention);
A61B5/00 A61J1/12 A61J1/14 A61M1/14 A61M1/34 A61M1/36 (Advanced/Non-invention);
A61B5/00 A61B5/02 A61M1/00 A61M1/02 A61M1/10 A61M1/14 A61M1/16 A61M1/36 A61M3/00 A61M5/00 F04B43/06 (Core/Invention);
A61J1/10 A61J1/14 A61M1/34 A61M1/36 (Core/Non-invention)

International class (IPC 1-7): A61B5/00 A61B5/02 A61B5/14 A61F1/24 A61M1/00 A61M1/03 A61M1/16 A61M1/36 A61M5/00 B01D31/00 E02D1/06 E21C7/04 F04B43/06 G01K13/02 G01N33/16 G01N33/48 G01N33/50 G01N35/00 G01N35/04

CPC: Y10S210/929 Y10S128/03 Y10S128/13 A61B5/00 A61J1/12 A61M1/02 A61M1/1037 A61M1/1692 A61M1/3496 A61M1/3643 A61M1/3679 A61M3/02 A61M2202/0241 A61M2205/331 A61M2205/3561 A61M2205/3592 A61M2205/6072 A61M2230/04 A61M2230/06 A61M2230/30 A61M1/3417 A61M1/3431 A61M1/3465 A61M1/3468 A61M1/3482 A61M1/3609 A61M1/1601 A61M2205/3331 A61M2205/3334 A61M2205/50 A61M1/3607 A61M2205/3317 A61M2205/3324 A61M2205/3344 A61M2205/3368 A61M2205/3379 A61M1/1605 A61M2205/18 A61M2205/3382 A61M2205/3386 A61M1/1006 A61M1/1039 A61M1/1086 A61M1/34 A61M1/3403 A61M1/341 A61M2230/65 A61M1/1005 A61M2205/12 A61M1/3621 A61M1/3639 A61M1/3672 A61M2205/128 A61M1/16 A61M1/1656 A61M1/1668 A61M1/1696 A61M2205/123 A61M2205/125 A61M2205/126 A61M2205/6018 F04B43/06 A61M2205/3306 A61M1/3641

European class: A61B5/00 A61M1/02 A61M1/03B A61M1/03D A61M1/10E A61M1/16 A61M1/16L A61M1/16R2 A61M1/36C A61M1/36C5 A61M1/36H A61M3/02 F04B43/06 K61J1/12 K61J1/14S K61M1/10A12 K61M1/16D2 K61M1/16R2 K61M1/34B1 K61M1/34E1P K61M1/34E4D K61M1/34E4F K61M1/34F3 K61M1/34P K61M1/36A4C K61M1/36C6 K61M1/36P K61M202/02D K61M205/12 K61M205/12B K61M205/12F K61M205/12F4 K61M205/12V K61M205/33D K61M205/33D2 K61M205/33M1 K61M205/35R2 K61M205/35T2 K61M205/60B K61M205/60P2 K61M230/04 K61M230/06 K61M230/30

US class: 128/214E 128/214F 128/214R 128/630 128/DIG.13 128/DIG.3 206/569 210/321.2 210/321.65 210/321.71 210/647 210/87 210/9.4 210/90 210/929 210/94 210/96.2 23/253R 232/530R 422/430 422/45 422/61 422/73 600/301 600/575 600/578 600/579 604/65 604/66

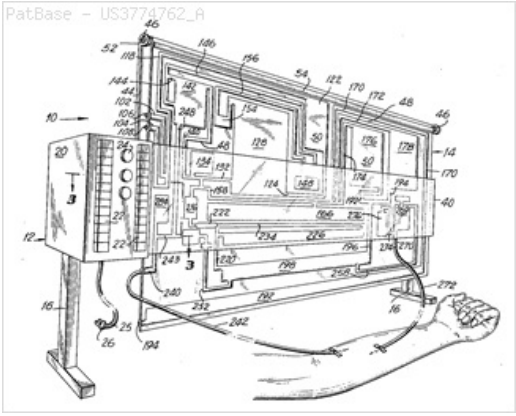
Classification Explorer

Cited documents: US4207871 A, US4206767 A, US4206755 A, US4151845 A, US4078562 A, US3946731 A, US3923060 A, US3912455 A, US3838682 A, US3809871 A, US3774762 A, US3756234 A, US3709222 A, US3689224 A, US3640388 A, US3533408 A, US3527572 A, US3513845 A, US3511238 A, US3497320 A, US3476515 A, US3441136 A, US3416664 A, US3406826 A, US3319623 A, US3043303 A, US2721732 A, US27132 A, GB1498332 A, FR2387659 A1, FR2298832 A1, DE2825134 A1, AU3632078 A1,

Forward Citations: WO9966833, WO9835710, WO9822163, WO9709075, WO9411093, WO9315780, WO9311845, WO9301845, WO9105576, WO9014850, WO9006781, WO8602858, WO8504112, WO8402473, WO8102979, WO16198579, WO16035098, WO13159935, WO10135078, WO09039357, WO09039357, WO09021075, WO09021075, WO08144577, WO08144575, WO08144575, WO08100989, WO08100989, WO08033788, WO08033788, WO07120816, WO07050211, WO06120417, WO06120417, WO06120415, WO06055745, WO05102441, WO05086879, WO04069311, WO04063876, WO04063876, WO04009158, WO04009158, WO03028860, WO03015847, WO0234314, WO0213691, WO02056992, WO0191831, WO0156631, WO0156631, WO0145769, WO0145769, WO0142758, WO0142758, WO0141831, WO0141831, WO0119318, WO0078374, WO0043063, WO0043046, WO0043046, WO0033898, USRE45717, USRE42834, USRE36386, USRE34800, USRE33858, USD750746, USD747784, USD728747, USD728746, USD681210, USD608004, USD607564, USD579553, USD463864, US9895109, US9889243, US9884144, US9872950, US9867921, US9863837, US9861742, US9855390, US9855377, 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Abstract:
Source: US3774762A A semi-automatic device for peroforming complex fluid processing procedures adapted to hemodialysis. The structure includes a disposable component formed by layers of transparent, flexible plastic sheets, **sealed** to each other according to a predetermined pattern defining between each pair flow paths and pockets which respectively form fluid passages and reservoirs. The structure also includes a permanent installation which is to receive the disposable component in order to form therewith a complete apparatus for automatically processing fluids, such as treating or determining the characteristics of a fluid such as human blood, according to predetermined sequences which may be controlled by internal and/or external information processing devices.


PatBase - US3774762_A

415) Family number: 1124045 (US3866435A)

Title: COOLING **CONTAINER**

Priority: DE19722227313 19720605 DE19722238829 19720807

Family:

Publication number	Publication date	Application number	Application date
DE2227313 A1	19731220	DE19722227313	19720605
DE2227313 C2	19840308	DE19722227313	19720605
DE2238829 A1	19740214	DE19722238829	19720807
DE2238829 B2	19810122	DE19722238829	19720807
DE2238829 C3	19810827	DE19722238829	19720807
ES415522 A1	19760301	ES19730415522	19730604
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GB1425717 A	19760218	GB19730025874	19730530
IT986363 A	19750130	IT19730068547	19730525
NL7306577 A	19731207	NL19730006577	19730511
US3866435 A	19750218	US19730366279	19730604
US3866436 A	19750218	US19730366280	19730604

Probable Assignee: BURGER EISENWERKE AG

Assignee(s):(std)**:** BURGER AG ; BURGER EISENWERKE AG ; LUBANSKA HOPE LONDON

Assignee(s): FIRMA BURGER EISENWERKE AKTIENGESELLSCHAFT ; BURGER EISENWERKE AKTIENGESELLSCHAFT ; KOHLENSAEURE WERKE RUDOLF BUSE SOHN GMBH AND CO ; KOHLENSAEURE WERKE RUDOLF BUSE SOHN GMBH AND CO 5462 BAD HOENNINGEN DE ; KOHLENSAEURE WERKE RUDOLF BUSE SOHN GMBH AND CO 5462 BAD HOENNINGEN ; BURGER EISENWERKE AG 6349 BURG ; BURGER EISENWERKE AG DT

Inventor(s):(std)**:** FRANK MARTIN A ; FRANK MARTIN DIPL ING ; TSCHENTSCHER DIETER ; FRANK KARL ; TSCHENTSCHER DIETER ING GRAD ; FRANK MARTIN A DIPL ING

Inventor(s): FRANK KARL 5460 LINZ DE ; TSCHENTSCHER DIETER ING GRAD 5440 MAYEN DE ; TSCHENTSCHER DIETER 5440 MAYEN ; FRANK MARTIN A DIPL ING 5000 KOELN DE ; FRANK KARL 5460 LINZ ; ANTRAG AUF NICHTNENNUNG ; FRANK MARTIN DIPL ING 5000 KOELN ; FRANK MARTIN DIPL ING 5000 KOELN DE

International class (IPC 8-9): F25D17/04 F25D3/12 (Advanced/Invention); F25D17/04 F25D3/00 (Core/Invention)

International class (IPC 1-7): B65D6/00 B65D81/18 B65D81/38 B65D87/38 F25B F25D11/00 F25D13/02 F25D25/02 F25D3/00 F25D3/06 F25D3/10 F25D3/12

CPC: F25D3/125 F25D17/04

European class: F25D17/04 F25D3/12B

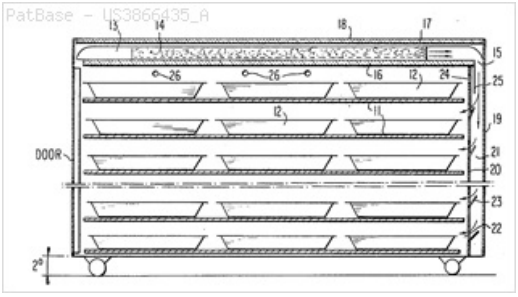
US class: 62/382 62/388 62/420 62/441 62/457.1 623/820

Classification Explorer

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Forward Citations: WO9840680, WO12177306, WO12177306, US9446847, US8814286, US6901767, US6626508, US6572207, US6295829, US6131404, US5397010, US4964283, US4802340, US4576017, US4502293, US4457142, US4399667, US4397159, US4339928, US2016153703, US2015251761, US2014318156, US2013320832, US2012325455, US2004079105, FR2760826, FR2696158, FR2629799, FR2626554, FR2534130, FR2498429, EP2781862, EP2546590, EP0968395, EP0591047, EP0337860, EP0296343, EP0166086, EP0080313, EP0077960, DE4006272, DE29718826, DE29508438, DE2731858, DE202006011143, DE102005059627,

Abstract:
Source: US3866435A A transportable refrigerating **container** including descending passage means operable to receive a gravity induced flow of coolant gas and having flow controlling aperture means providing individualized, controlled communication between the descending passage means and individual product compartments.



416) Family number: 1306847 (US3777716A)

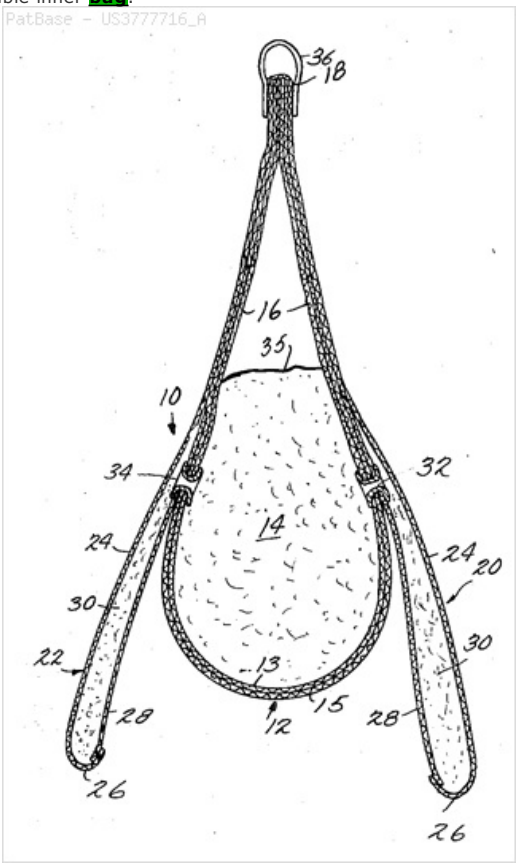
Title:	LIVESTOCK DUSTING **BAG**
Priority:	CA19730186782 19731127 US19710110575 19710128 US19750577013 19750513 US19730422341 19731206

Family:

Publication number	Publication date	Application number	Application date
CA1013141 A1	19770705	CA19730186782	19731127
CA969361 A1	19750617	CA19720132271	19720112
US3777716 A	19731211	US19710110575	19710128
US3902461 A	19750902	US19730422341	19731206
US3971342 A	19760727	US19750577013	19750513

Probable Assignee:	DALE ALLEY CO
Assignee(s):(std)**:**	ALLEY JOHNSON CO ; DALE ALLEY CO
Assignee(s):	UNITED AGRI PRODUCTS INC ; ALLEY JOHNSON CO US ; CORTNER WILLIAM C
Inventor(s):(std)**:**	CORTNER JR WILLIAM C ; CORTNER W ; CORTNER WILLIAM C JR
Inventor(s):	CORTNER W US ; CORTNER WILLIAM C
International class (IPC 8-9):	A01K13/00 A01K29/00 (Advanced/Invention); A01K13/00 A01K29/00 (Core/Invention)
International class (IPC 1-7):	A01K13/00 A01K29/00
CPC:	A01K13/003
European class:	A01K13/00D
US class:	119/159 119/656 119/661 119/672
Classification Explorer	
Cited documents:	US3821940 A, US3563209 A, US3494333 A, US3364900 A, US2814273 A, GB412744 A,
Forward Citations:	US8833308, US8701597, US8028661, US7195756, US7166294, US7156053, US7156052, US6849266, US5979108, US5666906, US5447122, US4258667, US4130092, US4079700, US4074659, US3972309, US3901195, US2015264912, US2011132952, US2010071632, US2008047500, US2006070583, US2006004060, US2004253725, US2004244717, US2004011296, US2003134877,

Abstract:
Source: US3777716A A self-dusting cartridge loading protected livestock applicator comprising an inner porous **bag** having filling means and flexible protective material substantially surrounding and secured to the **bag**. The flexible protective material extends below the inner porous **bag** forming folds which curl upward toward the bottom of the inner porous **bag** and preferably extend upward with a porous material that contacts and transfers dust from the inner **bag** to itself and to an animal. The applicator is constructed so that when it is agitated by an animal the guard or protective flaps cause dust to be **dispensed** on the agitating animal and at the same time provide some protection to the more vulnerable inner **bag**.



417) Family number: 24047097 (US3780781A)

Title: **OPENABLE BAG**

Priority: US19690882491 19691205 US19710178088 19710907 US19870027000 19870317 US19720226680 19720216

Family:

Publication number	Publication date	Application number	Application date
US3780781 A	19731225	US19710178088	19710907
US3827472 A	19740806	US19720226680	19720216
USRE33674 E	19910827	US19870027000	19870317

Probable Assignee: SEISAN NIPPONSHA KK

Assignee(s):(std)**:** SEISAN NIPPONSHA KK

Assignee(s): NMB POSTBANK GROEP NV ; SEISAN NIPPONSHA KK JA ; SEISAN NIPPON SHA LTD JA ; MINIGRIP INC ; MINIGRIP INC A CORP OF DE ; MINIGRIP INC ROUTE 303 ORANGEB ; MINIGRIP INC ROUTE 303 ORANGEBURG NEW YORK A CORP ; MINIGRIP INC ROUTE 303 ORANGEBURG NEW YORK A CORP OF DE

Inventor(s):(std)**:** URAMOTO T

Inventor(s): URAMOTO T JA

International class (IPC 8-9): A44B19/16 B29C65/00 B65D33/25 B65D75/58 (Advanced/Invention); B29C65/00 B65D33/25 B65D75/52 (Core/Invention)

International class (IPC 1-7): B65D17/24 B65D31/02 B65D33/24

CPC: A44B19/16 B65D33/2541 Y10S383/908 B65D75/5805 B29C66/4722 B65D33/2533 B29C66/474 B29C65/02 B29C65/222 B29C66/723 B29C66/72328 B29C66/7234 B29C66/1122

European class: B29C66/4722 B65D33/25A1C B65D33/25A3 B65D75/58B K44B19/16

US class: 150/0.3 383/107 383/116 383/119 383/204 383/63 383/65 383/908

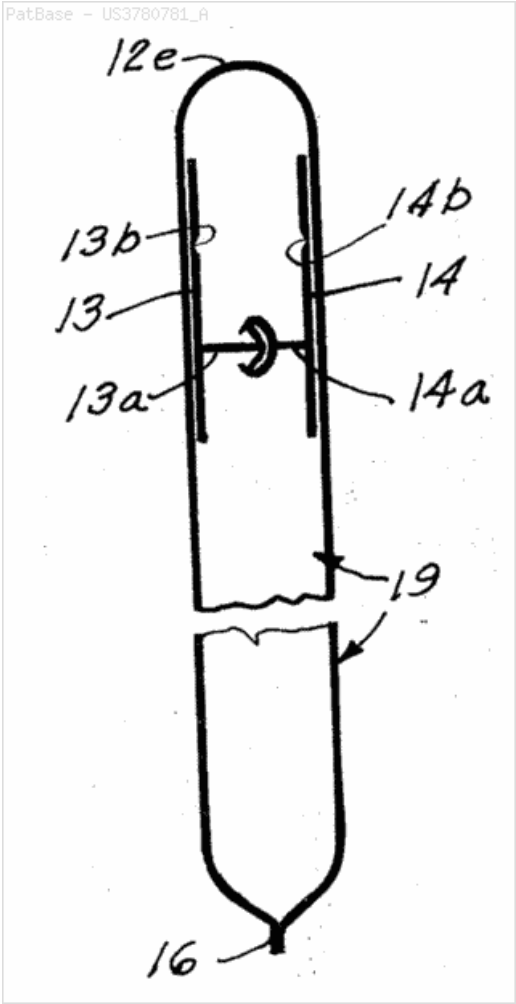
Classification Explorer

Cited documents: US3652006 A, US3633642 A, US3625270 A, US3619395 A, US3616990 A, US3543901 A, US3543343 A, US3473589 A, US3446632 A, US3387766 A, US3381592 A, US3371696 A, US3338284 A, US3323707 A, US3291377 A, US3198228 A, US2665834 A,

Forward Citations: WO9850598, WO9824339, WO9806635, WO9617792, WO9401345, WO9117086, WO8702968, WO15193001, WO15193000, WO15058427, WO15049501, WO03066438, WO03045816, WO03045816, WO0132521, USRE40284, USRE39505, USRE34905, US9781980, US9623613, US9550617, US9504295, US9475616, US9302835, US9296522, US9238536, US9126735, US9085393, US9011003, US8858077, US8827556, US8753011, US8568031, US8550716, US8540428, US8523437, US8506745, US8469593, US8312696, US8231273, US8176604, US8070359, US7967509, US7950851, US7946766, US7904996, US7904995, US7887238, US7886412, US7874731, US7857515, US7850368, US7784160, US7665192, US7604828, US7494333, US7424796, US7419300, US7410298, US7406810, US7395642, US7377015, US7322920, US7320545, US7316641, US7308783, US7261468, US7254873, US7192192, US7182513, US7165887, US7159282, US7137736, US7090904, US7086782, US7040808, US7008106, US6991375, US6988828, US6979482, US6979289, US6954970, US6913387, US6910806, US6851161, US6779921, US6719140, US6713152, US6712509, US6709157, US6663283, US6659643, US6611996, US6588177, US6575625, US6499878, US6481891, US6460238, US6450685, US6439770, US6431358, US6419391, US6416798, US6390715, US6378272, US6360513, US6318894, US6286999, US6279298, US6270257, US6257763, US6224262, US6217216, US6177172, US6152601, US6152600, US6149302, US6148588, US6132780, US6126975, US6110586, US6079878, US6071011, US6068585, US6030514, US6030122, US6010244, US6004032, US5964532, US5954433, US5951453, US5938339, US5927855, US5924795, US5911508, US5829884, US5823933, US5806984, US5782733, US5775812, US5769772, US5713669, US5672009, US5669715, US5664303, US5660479, US5613934, US5609420, US5552202, US5525363, US5456928, US5366294, US5292392, US5259904, US5246720, US5238306, US5224779, US5215380, US5198055, US5186543, US5172854, US5157811, US5127208, US5121997, US5118203, US5118202, US5116140, US5113555, US5112138, US5103979, US5103546, US5100246, US5092684, US5088164, US5064664, US5063069, US5046300, US5036643, US5033868, US5026563, US5023122, US5022530, US5004356, US5002781, US4986673, US4971454, US4969310, US4969309, US4966470, US4927271, US4923701, US4923309, US4903841, US4877336, US4874257, US4848928, US4846585, US4840611, US4807300, US4786190, US4767220, US4764977, US4756628, US4736450, US4720015, US4713839, US4709533, US4701358, US4683015, US4663915, US4655862, US4637063, US4617683, US4615045, US4589145, US4578813, US4572377, US4561109, US4528224, US4479244, US4363345, US4362198, US4335817, US4290467, US4249982, US4246288, US4212337, US4191230, US2015259103, US2012308166, US2012275730, US2012207409, US2012020590, US2011243481, US2011235951, US2011044566, US2010215291, US2010152010, US2010074562, US2009238501, US2008285896, US2008132394, US2008118189, US2008050247, US2007206888, US2007101556, US2007086682, US2006287181, US2006246185, US2006229183, US2006201626, US2006177155, US2006162289, US2006062496, US2006034551, US2005286811, US2005286810, US2005238265, US2005157959, US2005031232, US2005008268, US2004256761, US2004234173, US2004228547, US2004211696, US2004208399, US2004179754, US2004078939, US2004078938, US2004045141, US2004031132, US2004008909, US2003236158, US2003235352, US2003228078, US2003203799, US2003167606, US2003147565, US2003113042, US2003019780, JP5998258, JP5960949, JP2242749, JP2015212099, JP2013028394, JP2012201369, GB2378221, GB2378221, GB2148846, FR2832698, FR2744700, FR2614278, FR2590777, FR2451866, EP2511186, EP2492206, EP2374726, EP1458627, EP1431203, EP1325872, EP1325872, EP1263655, EP1263655, EP0921987, EP0547966, EP0423456, EP0302144, EP0134806, DE4227628, DE4227628, DE2619437, CN102656098, BE1002250, AU586483, AU572570,

Abstract:
Source: US3780781A A plastic film structure for forming a **bag** including a sheet of thin plastic film with continuous shaped interlocking rib and groove profiles thereon either integral with the film or on strips which are fused to the film with the sheet having plastic reinforcing strips thereon between the profiles with the reinforcing strips providing tear guidelines for tearing off the top of a **bag** formed from the sheet to thereafter provide gripping flanges for separating the profiles and **opening** the **bag**.

PatBase - US3780781_A



418) Family number: 7590625 (US3784087A)

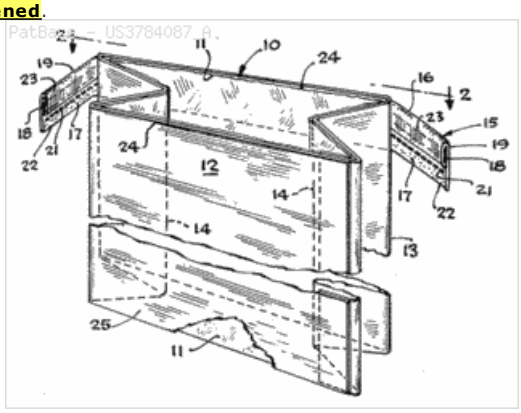
Title:	TAMPERPROOF, RECLOSEABLE **PACKAGE** AND **CLOSURE** THEREFOR
Priority:	US19720218407 19720117

Family:

Publication number	Publication date	Application number	Application date
US3784087 A	19740108	US19720218407	19720117

Probable Assignee:	KLOZ SEAL PROD CO INC
Assignee(s):(std):	KLOZ SEAL PROD CO INC
Assignee(s):	KLOZ SEAL PROD CO INC US
Inventor(s):(std):	STYERS H
Inventor(s):	STYERS H US
International class (IPC 8-9):	B65D33/30 B65D33/34 (Advanced/Invention); B65D33/16 B65D33/34 (Core/Invention)
International class (IPC 1-7):	B65D33/30 B65D33/34
CPC:	Y10S383/905 B65D33/34 B65D33/30
European class:	B65D33/30 B65D33/34
US class:	229/6.2 229/62 383/204 383/5 383/905 383/91
Classification Explorer	
Cited documents:	US3315877 A, US3295744 A, US3240327 A, US3203621 A, US2415139 A, US2103840 A, US1919819 A, CH362906 A, CH362906,
Forward Citations:	US8132393, US7775717, US6422752, US5190155, US5005264, US4917288, US4902142, US4818120, US4761079, US4610358, US4356954, US4038425, US2009223389, US2009052811, US2008050055, US2007095693, US2007080092, EP0304166, EP0304166, DE3714843,

Abstract:
Source: US3784087A A **container** having a tamperproof, reclosable **closure**, the **container** being of the **bag** or carton type and having an **opening** formed by opposite front and rear walls, the **closure** comprising a flat strip, a portion of which is folded upon itself to form an envelope for a deformable wire. The **closure** is formed from a paper strip heat-**sealable** on one side only so that when the heat-**sealable** side is folded in face-to-face relationship over a portion of the width of the strip to form an envelope for the deformable wire **sealed** therein, there results a segment along the length of the strip which is heat-**sealable** and an adjacent segment, containing the wire, which is not heat-**sealable**. The **closure** is attached to the flattened **opening** of a **bag** by heat-**sealing** it to one side and folding the ends thereof to the other side of the **bag** and **sealing** thereto. Accordingly, when attached and **sealed** to a **bag**, the envelope portion of the **closure**, containing the deformable wire, will not **seal** thereto so that the end **tab** portions of the enclosed wire can be unfolded from the **bag** permitting the **bag** to be **opened**. The **bag** can then be reclosed by refolding the enclosed wire **tabs**. Prior to the initial **opening**, the heat-**sealed** segment must be ruptured so that the **closure** provides an indication that the **container** has been **opened**.



419) Family number: 24047165 (US3899091A)

© PatBase

Title: Refuse collection apparatus

Priority:

CA19730168883 19730417
CA19760255650 19760625
CA19760255651 19760625
CA19760255652 19760625
CA19760255653 19760625
CA19760255654 19760625
DE19732327889 19730601
US19740440789 19740208
US19740440796 19740208
CA19760255655 19760625
US19740440745 19740208
US19740440722 19740208
US19740525598 19741120
US19720264021 19720619
US19870077431 19870724
US19870077432 19870724

Family:

Publication number	Publication date	Application number	Application date
AU197355383 A1	19741114	AU19730055383	19730508
BR7304451 A0	19740905	BR19730004451	19730614
CA1030906 A1	19780509	CA19760255652	19760625
CA1030906 A2	19780509	CA19760255652	19760625
CA1030907 A1	19780509	CA19760255653	19760625
CA1030907 A2	19780509	CA19760255653	19760625
CA1030908 A1	19780509	CA19760255654	19760625
CA1030908 A2	19780509	CA19760255654	19760625
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CA1030909 A2	19780509	CA19760255655	19760625
CA1030910 A1	19780509	CA19760255650	19760625
CA1030910 A2	19780509	CA19760255650	19760625
CA1030911 A1	19780509	CA19760255651	19760625
CA1030911 A2	19780509	CA19760255651	19760625
CA1031734 A1	19780523	CA19730168883	19730417
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DE2327889 B2	19781214	DE19732327889	19730601
DE2327889 C3	19790816	DE19732327889	19730601
DE2366257 C2	19830317	DE19732366257	19730601
DE2366450 A1	19820923	DE19732366450	19730601
FR2189280 A1	19740125	FR19730022043	19730618
FR2189280 B1	19780210	FR19730022043	19730618
GB1446051 A	19760811	GB19730022201	19730619
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GB1446053 A	19760811	GB19750050890	19730619
GB1446054 A	19760811	GB19750051655	19730619
GB1446055 A	19760811	GB19750051656	19730619
GB1446056 A	19760811	GB19760001427	19730619
GB1446057 A	19760811	GB19760011106	19730619
IT988260 A	19750410	IT19730050731	19730612
JP1023408 C3	19801128	JP19730068604	19730618
JP1104840 C3	19820716	JP19770031650	19770324
JP1104841 C3	19820716	JP19770031653	19770324
JP1104842 C3	19820716	JP19770031654	19770324
JP1108887 C3	19820813	JP19770031651	19770324
JP49067464 A2	19740629	JP19730068604	19730618
JP53018121 A2	19780220	JP19770031649	19770324
JP53018122 A2	19780220	JP19770031650	19770324
JP53018123 A2	19780220	JP19770031651	19770324
JP53018124 A2	19780220	JP19770031652	19770324
JP53018125 A2	19780220	JP19770031653	19770324
JP54110516 A2	19790830	JP19770031654	19770324
JP55011081 B4	19800322	JP19730068604	19730618
JP56048402 B4	19811116	JP19770031650	19770324
JP56048403 B4	19811116	JP19770031653	19770324
JP56048404 B4	19811116	JP19770031654	19770324
JP56051961 B4	19811209	JP19770031651	19770324
JP57174404 U1	19821104	JP19810166959U	19811109
JP61001121 Y2	19860116	JP19810166959U	19811109
SE399043 B	19780130	SE19730008520	19730618
SE399043 C	19780518	SE19730008520	19730618
SE7701163 A	19770203	SE19770001163D	19770203
SE7701163 L	19770203	SE19770001163	19770203
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SE7701164 L	19770203	SE19770001164	19770203
SE7701165 A	19770203	SE19770001165D	19770203
SE7701165 L	19770203	SE19770001165	19770203
SE7701166 A	19770203	SE19770001166D	19770203
US3899091 A	19750812	US19720264021	19720619
US3921832 A	19751125	US19740440789	19740208
US3929243 A	19751230	US19740440796	19740208
US3940006 A	19760224	US19740440722	19740208
US3994406 A	19761130	US19740525598	19741120
US3999669 A	19761228	US19740440745	19740208
USRE33602 E	19910604	US19870077431	19870724
USRE33730 E	19911029	US19870077432	19870724

Probable Assignee: SARGENT INDUSTRIES

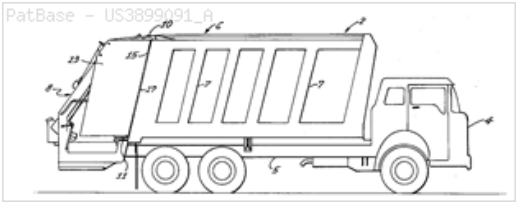
Assignee(s):(std)**:** SARGENT INCUSTRIES INC ; SARGENT IND ; SARGENT IND INC ; SARGENT INDUSTRIES ; SARGENT INDUSTRIES INC ; SARGENT INDUSTRIES INC US

Assignee(s):	SARGENT INDUSTRIES INC LOS ANGELES CALIF V ST A ; SMITH FRED T ; SARGENT IND INC LOS ANGELES CALIF V ST A ; SARGENT INDUSTRIES INC LOS ANGELES CALIF US
Inventor(s):(std):	F T SMITH ; FRED THOMAS SMITH ; FURETSUDO TOOMASU SUMISU ; SMITH F T ; SMITH FRED T ; SMITH F ; SMITH FRED THOMAS
Inventor(s):	SMITH FRED T DEARBORN HEIGHTS MICH US ; SMITH FRED T DEARBORN HEIGHTS MICH V ST A
International class (IPC 8-9):	B30B9/28 B60K17/28 B65F3/00 B65F3/14 B65F3/20 B65F3/24 B65F3/28 (Advanced/Invention); B65F3/00 (Advanced/Non-invention); B30B9/00 B60K17/00 B65F3/00 (Core/Invention)
International class (IPC 1-7):	B30B9/00 B60P1/00 B65D7/02 B65F3/00 B65F3/02 B65F3/14 B65F3/20 B65F3/24 B65F3/28 B65F5/00 C07J1/00 C07J75/00
CPC:	B65F3/28 Y10S220/908 B65F3/207
European class:	B65F3/20G B65F3/28
US class:	100/233 100/295 214/82 214/83.3 220/1T 220/600 220/908 414/501 414/509 414/511 414/517 414/525.4 414/525.5 414/525.54 414/679 414/917 60/431

Classification Explorer

Cited documents:	US3799375 A, US3777917 A, US3767068 A, US3727779 A, US3709389 A, US3696951 A, US3682336 A, US3667629 A, US3662908 A, US3615029 A, US3615028 A, US3559825 A, US3556324 A, US3499558 A, US3455471 A, US3273728 A, US3254782 A, US3249243 A, US3232463 A, US3220586 A, US3212656 A, US3195744 A, US3188131 A, US3143230 A, US3092269 A, US3049256 A, US3034824 A, US2928562 A, US2865286 A, US2849949 A, US2813641 A, US2812973 A, US2800234 A, US2746240 A, US2733820 A, US2690712 A, US2526116 A, US2502703 A, US2430973 A, US2355794 A, US2144450 A, US1948137 A, US1214567 A, JP45018801 Y1, FR2097711 A5, DE2126780 C3,
Forward Citations:	US9573508, US9295198, US8403244, US7992814, US7918638, US7878751, US7066705, US6722839, US6719349, US6485244, US6398478, US6238167, US6234739, US6123497, US5954470, US5816766, US5498067, US5158340, US5123801, US5029522, US4863336, US4664017, US4642019, US4637306, US4578015, US4551055, US4473333, US4460307, US4453880, US4383790, US4382740, US4042133, US2009256018, US2008298941, US2008145200, US2005241187, US2005105993, JP62077102, JP57122947, JP55174134, JP55127737, JP55046477, JP54140314, JP53122818, JP53119516, JP53005870, JP52137815, JP51079417, JP4122183, JP2145204, ITMN20090010, GB2131386, FR2537554, FR2436092, EP0157272, EP0100264, EP0049724, DE3121323, DE2759576, DE2736593,

Abstract:
Source: US3899091A The upper panel of a tailgate assembly is moved in a downward and rearward convexly curved path between an upward and forward position and a rearward and lowered position and the lower panel is rotated forwardly and rearwardly with respect to the upper panel. Linkages are included in the tailgate assembly to provide this movement. A lower surface of the fixed panel may have an upwardly curved lower surface which imparts a forward direction of movement to refuse which is packed against it. The upper panel may have a curved forward surface in close proximity to a rearward surface of the fixed panel. During movement of the upper panel, the rearward surface of the fixed panel removes refuse from the curved forward surface. The upper panel is tilted as it moves and during its upward movement the lower portion of the upper panel is tilted forwardly. This imparts a forward movement to refuse which is moved through the **opening** into the **storage** body. The hopper may include a vertically inclined forward packing surface so that refuse is packed between the curved packing surface and the vertically inclined forward packing surface of the hopper. The hopper may include a straight rearward wall portion with the packing panel having a narrowed lower edge. During its movement into the hopper, the packing panel may be moved so that its narrowed lower edge is in contiguous relation to the straight rearward wall portion of the hopper. The packing panel may include one or more upstanding ribs on its curved packing surface which provide a reduced area for application of high localized pressures to refuse contacted by a rib.



420) Family number: 1151968 (US3901301A)

© PatBase

Title: PNEUMATIC TIRES AND WHEEL ASSEMBLIES

Priority: GB19720051914 19721110

Family:

Publication number	Publication date	Application number	Application date
AU197362199 A1	19750508	AU19730062199	19731106
BE806987 A	19740301	BE19730137469	19731106
CA985998 A1	19760323	CA19730185192	19731106
DE2356111 A1	19740612	DE19732356111	19731109
FR2206202 A1	19740607	FR19730039694	19731108
FR2206202 B1	19761203	FR19730039694	19731108
GB1456196 A	19761117	GB19720051914	19721110
IE38595 B	19780426	IE19730001973	19731101
IE38595 L	19740510	IE19730001973	19731101
IT1003174 A	19760610	IT19730031101	19731109
JP49134005 A2	19741224	JP19730126148	19731109
LU68774 A	19740121	LU19730068774	19731109
NL7315310 A	19740514	NL19730015310	19731108
US3901301 A	19750826	US19730413604	19731107
ZA7308502 A	19741127	ZA19730008502	19731105

Probable Assignee: DUNLOP LTD

Assignee(s):(std)**:** DUNLOP LTD ; DUNLOP CO LTD

Assignee(s): DUNLOP LIMITED ; DUNLOP LTD DUNLOP HOUSE RYDER STREET ST JAMES S LONDON SW 1 GR BR ; THE DUNLOP COMPANY LIMITED ; DUNLOP LTD GB ; DUNLOP LTD LONDON ; EDWARDS REGINALD H ; DUNLOP LTD DUNLOP HOUSE RYDER STREET STJAMES S LONDON SW1 GR BR

Inventor(s):(std)**:** EDWARDS R ; EDWARDS REGINALD H ; EDWARDS REGINALD HAROLD

Inventor(s): EDWARDS REGINALD HAROLD SUTTON COLDFIELD WARWICKSHIRE GROSSBRITANNIEN ; REGINALD HAROLD EDWARDS

International class (IPC 8-9): B60C17/00 B60C17/10 B60C19/00 B60C5/00 (Advanced/Invention);
B60C17/00 B60C5/00 (Advanced/Non-invention);
B60C17/00 B60C19/00 B60C5/00 (Core/Invention)

International class (IPC 1-7): B60B19/00 B60B21/12 B60C17/00 B60C19/00 B60C21/08 B60C5/00 B65D47/36 B65D53/00

CPC: B60C17/10

European class: B60C17/10

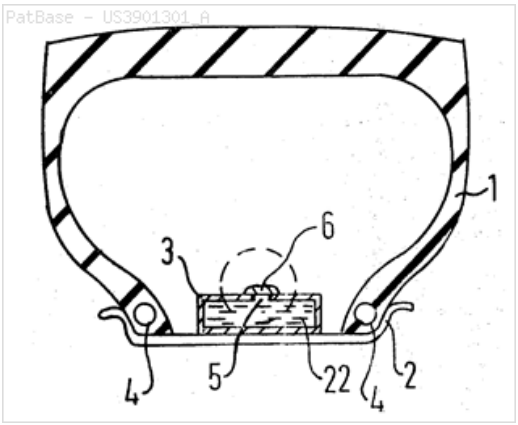
US class: 152/330L 152/521

Classification Explorer

Cited documents: US3739829 A, US2552336 A, US2399572 A,

Forward Citations: WO03029034, WO0128789, US6944948, US6837104, US6557604, US4258771, US4202392, US4054168, US2004065398, US2002117244, GB2403197, FR2830212, FR2235812, FR2235812,

Abstract:
Source: US3901301A Enclosing means for enclosing at least part of a lubricant composition for use in pneumatic tire/wheel assemblies, comprises a **container** having an aperture therein **sealable** by a **sealing** member which member comprises a solid material having a softening and/or melting point in the range 60'C, to 100'C, the solid material allowing release of the composition when the temperature in the assembly rises due to use thereof in a deflated condition. 27 Claims, 12 Drawing Figures



421) Family number: 7626860 (US3789570A)

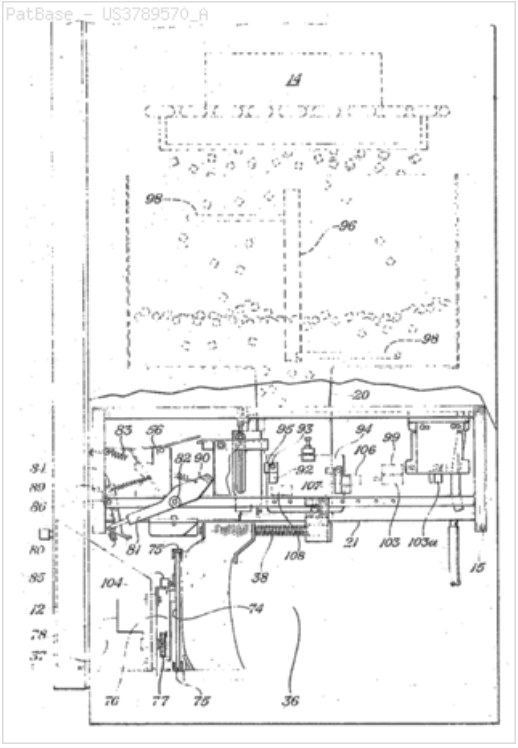
Title:	BAGGING APPARATUS AND METHOD
Priority:	US19720306676 19721115

Family:

Publication number	Publication date	Application number	Application date
US3789570 A	19740205	US19720306676	19721115

Probable Assignee:	MULLINS J
Assignee(s):(std):	MULLINS J
Assignee(s):	MULLINS J US
Inventor(s):(std):	MULLINS J
Inventor(s):	MULLINS J US
International class (IPC 8-9):	B65B43/28 (Advanced/Invention); B65B43/26 (Core/Invention)
International class (IPC 1-7):	B65B43/28
CPC:	B65B43/28
European class:	B65B43/28
US class:	53/284.7 53/29 53/384.1 53/459 53/477 53/572
Classification Explorer	
Cited documents:	US3075324 A, US2601480 A,
Forward Citations:	WO9206006, US9828127, US9696082, US9689601, US9688423, US9643742, US9562711, US9527610, US9481478, US9409726, US9193490, US8935906, US8800305, US8763352, US8739557, US8689523, US8561655, US8534034, US8528302, US8468784, US8381534, US8356850, US8353146, US8245488, US8132392, US8122689, US7849660, US7810301, US7806152, US7735527, US7681408, US7497062, US7426945, US7426812, US7207156, US6904946, US5822955, US5546732, US5513479, US5467578, US5458851, US5440863, US5277016, US5249409, US5109651, US4989391, US4798042, US4700755, US4368608, US4253292, US4198800, US4172349, US4132049, US3916603, US3869065, US2013067870, US2012111449, US2011185749, US2010326013, US2010319806, US2010313524, US2010263335, US2010206899, US2010024363, US2009120039, US2008295462, US2008196788, US2007267086, US2007240441, US2007209330, US2006174969, US2006005564, US2004084106, JP6064602, JP3183476, FR2373448, FR2373448, EP0908387, EP0550698,

Abstract:
Source: US3789570A This invention relates to an apparatus and method for automatically bagging material, especially ice cubes, and is particularly adapted to be coin operated. The apparatus includes a carrier having a measuring cavity therein with the carrier being reciprocable between a rearward position where the cavity is filled by the material to be bagged and a forward discharge position where the measured quantity of material is dumped into an **open** **bag**. A supply of flattened plastic **bags** is provided below the carrier and are supported by rods passing through **openings** in an upward extension of the rear side of the **bag**. The **bags** are supported in a **bag** **storage** section in such a way that a portion of the rearward wall extension of the **bag** is inclined upwardly and rearwardly away from the remainder of the **bag**. When it is desired to **open** the **bag**, a rod having a thin lower end is released to engage the inclined surface of the first **bag** and then is moved along this surface to drop inside the **bag** and then to partially **open** the **bag**. After the **bag** has been partially **opened**, a **bag** supporting means is clamped to the forward side of the **bag** to move it to a more fully **open** position and to move the lower end of the **bag** away from the remaining **bags** so that a door can be slid between the **bag** in the filling section and the other **bags** in the **storage** section. After the **bag** has been filled, the **bag** supporting means is released from the **bag** and a heat **sealing** means is actuated to form a heat **seal** across the upper portion of the **bag**. The **bag** can then be pulled from the supporting rods and removed from the machine.



422) Family number: 7628787 (US3790029A)

Title:	APPARATUS FOR **DISPENSING** AND MIXING LIQUIDS
Priority:	US19710177019 19710901

Family:

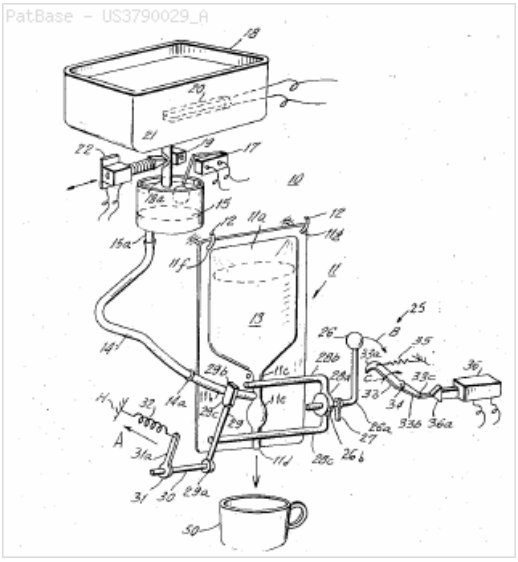
Publication number	Publication date	Application number	Application date
US3790029 A	19740205	US19710177019	19710901

Probable Assignee:	WARD W
Assignee(s):(std):	WARD W
Assignee(s):	WARD W US
Inventor(s):(std):	WARD W
Inventor(s):	WARD W US
International class (IPC 8-9):	A47J31/40 B65D81/00 B65D85/804 B67D3/00 B67D3/04 (Advanced/Invention); A47J31/40 B65D81/00 B65D85/804 B67D3/00 (Core/Invention)
International class (IPC 1-7):	B67D5/56
CPC:	A47J31/407 B65D85/8043 B67D3/0019 B67D3/041
European class:	A47J31/40B A47J31/40H B65D81/00B3 B65D85/804B B67D3/00E B67D3/04B
US class:	222/129.4

Classification Explorer

Forward Citations: WO16204615, WO06083473, WO04065258, WO04065258, USD557057, US9828153, US9821996, US9708109, US9451847, US9365405, US9272827, US9260284, US9247846, US9113654, US9101163, US8852659, US8771768, US8740020, US8590753, US8168247, US8167169, US8118191, US8087347, US8033211, US7950547, US7921766, US7810674, US7673558, US7640843, US7607385, US7592027, US7555979, US7533604, US7533603, US7418899, US7340990, US7335188, US7328651, US7322277, US7316178, US7308851, US7293675, US7287461, US7255039, US7243598, US7237691, US7231869, US7219598, US7213506, US7097074, US7007824, US6905314, US6769231, US6711934, US5773067, US5076332, US5056568, US4967811, US4789014, US4228926, US3938639, US2011206540, US2011166910, US2011120565, US2010247714, US2010140295, US2010128556, US2010108710, US2010078446, US2010055252, US2009317527, US2009317518, US2009293530, US2009126581, US2009064866, US2009014467, US2007175334, US2007163446, US2007158360, US2007157821, US2007023449, US2006169148, US2006132247, US2005277848, US2005103204, US2005011908, US2004211322, US2004206245, US2004197444, US2004191372, US2004191371, US2004191370, US2004188459, US2004187696, US2004187695, US2004182251, US2004182250, US2004180123, US2004180119, US2004177765, US2004177764, US2004173102, US2004094573, US2004007588, US2003056565, US2003017066, US2003017056, US2003014945, NL2014993, NL1032080, GB2366510, GB2275912, EP2340749, EP1808381, EP1445234, EP1440910, EP1374748, DE102007024297,

Abstract:
Source: US3790029A A **bag** having cavities and conduits is provided for the **storage**, selective passage and mixing of liquids. The **sealed** cavities contain liquids and the conduits are so connected as to cause the liquids to enter a mixing and metering pod from which the thus mixed liquids are **dispensed**. The arrangement is advantageously adapted for use in **dispensing** cold or hot drinks. 7 Claims, 15 Drawing Figures



423) Family number: 19172586 (US3929251A)

Title: **CONTAINER** WALL WITH RUPTURABLE WEAKENING LINE

Priority: CA19730178731 19730814 CA19760253331 19760526 US19740466405 19740502 US19730357937 19730507 US19720318476 19721226 US19720281541 19720817 US19750635715 19751126 US19740521692 19741107

Family:

Publication number	Publication date	Application number	Application date
AR200735 A1	19741213	AR19730249591	19730816
AT347324 B	19781227	AT19730007039	19730810
AT703973 A	19780415	AT19730007039	19730810
AU197359096 A1	19750306	AU19730059096	19730809
AU197359154 A1	19750213	AU19730059154	19730813
AU465841 B2	19751009	AU19730059154	19730813
AU473673 B2	19760701	AU19730059096	19730809
BE803295 A	19740207	BE19731005281	19730807
BG27066 A3	19790815	BG19730024308	19730811
BR7306150 A0	19740725	BR19730006150	19730810
CA1007183 A1	19770322	CA19730178731	19730814
CA1009091 A1	19770426	CA19760253331	19760526
CA1009091 A2	19770426	CA19760253331	19760526
CA993818 A1	19760727	CA19730168950	19730417
CH584138 A	19770131	CH19730011537	19730809
CS182238 B2	19780428	CS19730005801	19730816
DD105169 C	19740412	DD19730172821	19730810
DE2341077 A1	19740418	DE19732341077	19730810
DE2341077 B2	19771013	DE19732341077	19730810
DE2341077 C3	19780601	DE19732341077	19730810
DE2366001 A1	19770414	DE19732366001	19730810
ES216849 U	19760801	ES19750216849U	19751120
ES216849 Y	19761216	ES19750216849U	19751120
ES417820 A1	19760616	ES19730417820	19730811
FI53104 B	19771031	FI19730002522	19730810
FI53104 C	19780210	FI19730002522	19730810
FR2196275 A1	19740315	FR19730028657	19730806
FR2196275 B1	19780804	FR19730028657	19730806
GB1436617 A	19760519	GB19730035010	19730723
HK3877 A	19770128	HK19770000038	19770120
HU170104 P	19770428	HU1973AU00309	19730816
IE38044 B	19771207	IE19730001256	19730723
IE38044 L	19740217	IE19730001256	19730723
IL42852 A0	19731025	IL19730042852	19730730
IL42852 A1	19760229	IL19730042852	19730730
IN138975 A	19760417	IN1973CA01776	19730801
IT994140 A	19751020	IT19730051944	19730809
JP49052081 A2	19740521	JP19730089159	19730808
JP56028779 B4	19810703	JP19730089159	19730808
NL7311052 A	19740219	NL19730011052	19730809
NO139915 B	19790226	NO19730003178	19730809
NO139915 C	19790606	NO19730003178	19730809
PH10677 A	19770805	PH19730014886	19730803
PH10677 A	19770805	PH19730000148	19730803
PH10677 A	19770805	PH19730014886	19730803
PH11974 A	19780928	PH19780014885	19780803
PH11974 A	19780928	PH19780000148	19780803
PH11974 A	19780928	PH19780014885	19780803
PL89384 P	19761130	PL19730164710	19730816
RO62365 P	19771115	RO19730075783	19730811
SE406306 B	19790205	SE19730010198	19730723
SE406306 C	19790517	SE19730010198	19730723
US3929251 A	19751230	US19730357937	19730507
US3938455 A	19760217	US19740521692	19741107
US3946683 A	19760330	US19740466405	19740502
US3997076 A	19761214	US19750635715	19751126
ZA7305040 A	19740626	ZA19730005040	19730724

Probable Assignee: ALUMINUM CO OF AMERICA

Assignee(s):(std)**:** ALUMINIUM CO ; ALUMINIUM CO OF AMERICA ; ALUMINIUM CO OF AMERICA US ; ALUMINUM CO OF AMERICA ; ALUMINIUM COMPANY OF AMERICA ; ALUMINIUM COMPANY OF AMERICAN ; ALUMINIUM COMP OF AMERICA ; ALUMINUM COMP OF AMERICA ; ALUMINUM CY OF AMERICA ALCOA BUILDING PITTSBURGH E ; ALUMINUM CY OF AMERICA US ; ALUMINUM CY OF AMERICA

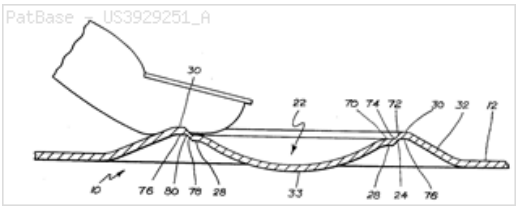
Assignee(s): ALUMINUM COMPANY OF AMERICA US ; ALUMINUM COMPANY OF AMERICA ; ALUMINUM COMPANY OF AMERICA PITTSBURGH PA V ST A ; ALUMINUM CY OF AMERICA ALCOA BUILDING PITTSBURGH ETAT DE PENNSYLVANIA E U A ; ALUMINUM CY OF AMERICA ALCOA BUILDING PITTSBURGH ETAT DE PENNSYLVANIA EUA ; ALUMINUM CO OF AMERICA PITTSBURGH PA VSTA ; JORDAN CHARLES L ; URMSTON HUGH C ; ALUMINIUM CO OF AMERICAN ; ALUMINUM CO ; ALUMINUM CO OF AMERICA PITTSBURGH PA V ST A ; ALUMINUM COMPANY

Inventor(s):(std)**:** H C URMSTON ; HC URMSTON ; HUGH CLARK URMSTON ; JORDAN C ; JORDAN C L ; JORDAN CHARLES L ; C L JORDAN ; CHARLES LOUIS JORDAN ; CL JORDAN ; URMSTON H ; URMSTON H C ; URMSTON HUGH C ; URMSTON HUGH CLARK ; URNSTON H ; JORDAN CHARLES LOUIS

Inventor(s): URMSTON HUGH CLARK RICHMOND IND ; WIRD SPAETER GENANNT WERDEN ; URMSTON HUGH C US ; CLARK URMSTON HUGH ; JORDAN CHARLES L US ; JORDAN CHARLES LOUIS PITTSBURGH PA ; LOUIS

	JORDAN CHARLES
Agent(s):	REINHOLD COHN AND PARTNERS
International class (IPC 8-9):	B21D22/02 B21D39/00 B21D51/26 B21D51/30 B21D51/38 B21D51/40 B21D51/44 B65D1/20 B65D17/00 B65D17/32 B65D47/36 (Advanced/Invention); B21D22/00 B21D39/00 B21D51/26 B21D51/30 B21D51/38 B65D1/00 B65D17/00 B65D17/28 B65D47/00 (Core/Invention)
International class (IPC 1-7):	B21D22/02 B21D22/20 B21D39/00 B21D51/26 B21D51/30 B21D51/38 B21D51/40 B21D51/44 B65D17/00 B65D17/02 B65D17/06 B65D17/08 B65D17/10 B65D17/16 B65D17/24 B65D17/28 B65D17/32 B65D41/26 B65D41/32 B65D41/56 B65D47/36 B65D51/22 B67B5/00
CPC:	B65D17/404 B65D17/401 B65D2205/00 B21D51/383
European class:	B21D51/38B B65D17/16B B65D17/24 L65D205/00
US class:	113/121C 113/15A 215/253 220/268 413/17
Classification Explorer	
Cited documents:	US3929251 A, US3912114 A, US3902626 A, US3848557 A, US3779417 A, US3759206 A, US3730381 A, US3715052 A, US3698590 A, US3693827 A, US3688718 A, US3687099 A, US3638825 A, US3610463 A, US3576272 A, US3426714 A, US3411470 A, US3410436 A, US3406866 A, US3362570 A, US3362569 A, US3292826 A, US3227304 A, US3221924 A, US2434375 A, US2210225 A, US2187433 A, US2159325 A, US2119533 A, NO44198 A, NL7101441 A, GB1164179 A,
Forward Citations:	WO9916676, WO8002272, WO8001558, WO0151364, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD691039, US9714115, US9694935, US9446879, US9233784, US9199763, US9016034, US8733576, US8567158, US8454292, US8371467, US8328492, US8113375, US8104319, US8052005, US7350392, US6840668, US6761281, US6604647, US6494074, US6427860, US6004089, US5974851, US5860553, US5832770, US5692636, US5680952, US5307947, US5232113, US5148935, US5147057, US5121851, US4991732, US4982862, US4976368, US4957216, US4932555, US4928844, US4909407, US4759460, US4669626, US4597505, US4504181, US4354784, US4348464, US4258859, US4216736, US4215795, US4157693, US4154184, US4081104, US4043481, US4036159, US4027612, US4006700, US4003494, US3997076, US2012131848, US2011212225, US2010287886, US2009269169, US2009266824, US2009223956, US2008050207, US2007108209, US2005218106, US2005018746, US2004211780, JP51116205, JP51008081, FR2460852, EP1072336, EP1044886, EP0110566, EP0110566, DE2637420, DE2623704,

Abstract:
Source: US3929251A An improved method of forming and a construction for a digitally **openable** **container** **closure**. Included therein is a **container** wall having an inwardly displaceable **opening** panel defined by a fracturable web which has been formed by selectively displacing metal adjacent a predetermined line substantially perpendicular to the surface of the **container** wall and by extruding metal between substantially parallel die surfaces which are disposed at an angle to the plane of the **container** wall. Formed concurrently therewith is an integral inclined deflectable portion projecting outwardly from the **container** wall adjacent the fracturable web and which deflectable portion is adapted to effect, in response to digitally applied inwardly directed pressure, a relative displacement between the rim of the panel and the lip of the adjacent **container** wall to selectively strain the web and initiate fracture thereof to permit inward displacement of an **opening** panel of greater extent than the size of the **opening** formed in the **container** wall by the separation of said panel.



424) Family number: 1364490 (US3791894A)

Title: DENESTER SYNCHRONIZER APPARATUS AND METHOD

Priority: US19720284035 19720828

Family:

Publication number	Publication date	Application number	Application date
CA990563 A1	19760608	CA19730176853	19730719
DE2342582 A1	19740314	DE19732342582	19730823
DE2342582 B2	19760401	DE19732342582	19730823
DE2342582 C3	19761118	DE19732342582	19730823
FR2197706 A1	19740329	FR19730030624	19730823
FR2197706 B1	19760507	FR19730030624	19730823
GB1410155 A	19751015	GB19730036755	19730802
JP49057989 A2	19740605	JP19730096053	19730827
JP53021359 B4	19780701	JP19730096053	19730827
JP941465 C3	19790220	JP19730096053	19730827
NL7311439 A	19740304	NL19730011439	19730820
SE396581 B	19770926	SE19730011612	19730827
SE396581 C	19780105	SE19730011612	19730827
US3791894 A	19740212	US19720284035	19720828

Probable Assignee: PACKAGING RESOURCES INC

Assignee(s):(std)**:** KOEHRING CO

Assignee(s): KOEHRING CO A CORP OF DE ; KOEHRING COMP US ; KOEHRING COMPANY ; KOEHRING CY ; KOEHRING CY US ; MISTARZ ROBERT J ; PACKAGING RESOURCES INC ; UNION BANK OF SWITZERLAND NEW YORK BRANCH AS AGENT ; PACKAGING RESOURCES INC A CORP OF DE ; UNION BANK OF SWITZERLAND NEW YORK BRANCH AGENT AS

Inventor(s):(std)**:** MISTARZ R ; MISTARZ R J ; MISTARZ ROBERT J

Inventor(s): R J MISTARZ ; MISTARZ R US ; J MISTARZ ROBERT

International class (IPC 8-9): B29C51/00 B29C63/00 B65B43/42 B65B43/44 B65B57/04 B65B7/28 (Advanced/Invention); B29C51/00 B29C63/00 B65B43/42 B65B57/02 B65B7/28 (Core/Invention)

International class (IPC 1-7): B29C27/02 B29C27/08 B31B17/00 B32B31/16 B65B43/00 B65B43/42 B65B57/04 B65B7/16 B65D11/04 B65G29/00 B65G37/00

CPC: Y10T29/49893 Y10T29/53052 Y10T29/53322 Y10T156/1744 Y10T156/1746 Y10T156/1771 B65B57/04 B65B43/42

European class: B65B43/42 B65B57/04

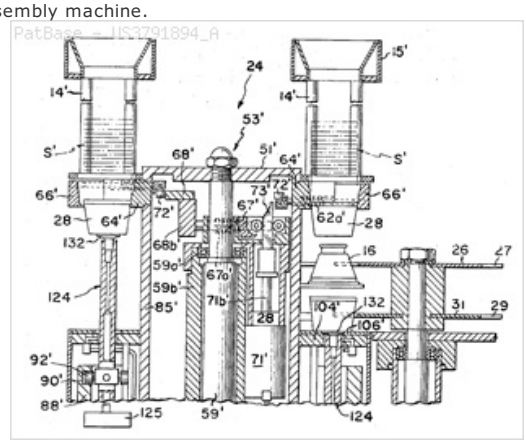
US class: 156/351 156/362 156/363 156/366 156/367 156/556 156/557 156/567 156/6. 156/60 156/73.5 29/463 29/712 29/773 414/795.6 53/281 53/329.4 53/452

Classification Explorer

Cited documents: US3736896 A, US3708376 A, US3607581 A, US3585096 A, US3453803 A, US3297504 A, US3220908 A, US2866306 A, DE1804580 A1,

Forward Citations: US5858143, US5704194, US5478422, US4208976, US2013075419, US2008047921, JP51148589,

Abstract:
Source: US3791894A **Container** assembly apparatus, for joining vertically aligned **container** halves, wherein apparatus for supplying upper and lower vertically aligned **container** halves to joining apparatus at a **container** assembly station is provided. The **container** half supplying apparatus includes upper and lower **container** half denesters which move stacks of upper and lower nested **container** halves in independent paths of travel and successively denest the **container** halves in the stacks and discharge them at generally laterally spaced, upper and lower **container** half discharge stations, respectively. The **container** half supplying apparatus also includes mechanism for moving the discharge upper **container** sections from the upper half discharge station into juxtaposed relation with the lower **container** halves discharged at the lower half discharge station, and control mechanism, operatively connected in circuit with the upper and lower **container** half denesters, for operating them to insure the release of the upper and lower **container** halves at appropriate times during the cycle. The control mechanism includes control elements for insuring that the upper and lower **container** halves, and particularly the initially and the finally released **container** halves at the upper and lower half discharge stations, are denested and discharged in properly timed relation to provide sets of vertically aligned halves to travel to the **container** assembly machine.



425) Family number: 8622176 (US3972155A)

Title: **PACKAGING** TECHNIQUES FOR SEMI-RIGID **PACKAGES**

Priority: US19690860590 19690924 US19730384717 19730801 US19770834429 19770919 US19760683256 19760505 US19780913822 19780608 US19790055765 19790709 US19810248437 19810327

Family:

Publication number	Publication date	Application number	Application date
US3792181 A	19740212	US19690860590	19690924
US3972155 A	19760803	US19730384717	19730801
US4114348 A	19780919	US19770834429	19770919
US4277931 A	19810714	US19790055765	19790709
US4349999 A	19820921	US19810248437	19810327

Probable Assignee: MAHAFFY AND HARDER ENG CO

Assignee(s):(std)**:** MAHAFFY AND HARDER ENG CO

Assignee(s): MAHAFFY AND HARDER ENG CO US ; MAHAFFY AND HARDER ENGINEERING CO ; MAHAFFY AND HARDER ENGINEERING COMPANY

Inventor(s):(std)**:** HAMILTON JOEL A ; MAHAFFY REID A ; MAHAFFY R ; HAMILTON J

Inventor(s): MAHAFFY R US ; HAMILTON J US

International class (IPC 8-9): B65B31/02 B65B61/18 B65B9/04 B65D75/32 (Advanced/Invention); B65B31/02 B65B61/18 B65B9/00 B65D75/28 (Core/Invention)

International class (IPC 1-7): B65B25/00 B65B31/02 B65B43/08 B65B47/10 B65B61/18 B65D43/08 B65D81/34

CPC: B65B61/18 B65B31/021 Y10S53/90 B65B9/04 B65D75/32 B65D75/322

European class: B65B31/02C B65B61/18 B65B9/04 B65D75/32 B65D75/32B1

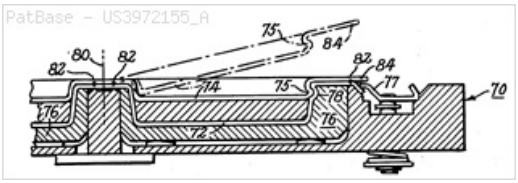
US class: 206/484 206/524.6 229/125.36 249/117 426/123 426/129 426/392 53/128 53/138.1 53/139.2 53/30R 53/412 53/427 53/433 53/453 53/510 53/511 53/559 53/579 53/900

Classification Explorer

Cited documents: US4101256 A, US3997052 A, US3754372 A, US3709702 A, US3695900 A, US3676159 A, US3661684 A, US3545163 A, US3498018 A, US3481101 A, US3481100 A, US3470281 A, US3392871 A, US3363395 A, US3353218 A, US3348358 A, US3338997 A, US3290418 A, US3221472 A, US3126582 A, US2982073 A, US2749572 A, US2012529 A, US1988383 A, DE1188791 B, CA766598 A,

Forward Citations: WO8801592, WO16033281, WO15108816, WO14004493, WO13083834, WO13075900, USD752995, USD735055, US9227743, US9139320, US8911807, US8561282, US8523437, US8468786, US8281559, US8158174, US8091322, US8088421, US8012521, US7937909, US7815428, US7793532, US7731997, US7682144, US7665281, US7661246, US7604828, US7575770, US7464519, US7415428, US7320545, US7316148, US7313900, US7205016, US7172779, US7165887, US7147799, US7093734, US7086782, US6926846, US6913387, US6910806, US6866832, US6848160, US6666988, US6643995, US6508955, US6494023, US6395195, US6360513, US6321509, US6315921, US6280787, US6234781, US6231905, US6221411, US6216419, US6183790, US6132781, US6103281, US6085930, US6054153, US5950821, US5948457, US5928560, US5840243, US5820904, US5811142, US5795604, US5770249, US5730311, US5702743, US5698250, US5629060, US5542234, US5520939, US5520101, US5337542, US5293997, US5238306, US5237800, US5226531, US5188461, US5155974, US5155971, US5129517, US5129512, US5115624, US5107658, US5105603, US5103618, US5076436, US5050736, US5048268, US5031383, US5025611, US5014856, US5010714, US5005707, US4959948, US4957753, US4945710, US4944134, US4925318, US4875587, US4862676, US4840271, US4833862, US4796408, US4782951, US4770293, US4765463, US4642239, US4632717, US4610885, US4586316, US4555290, US4424659, US4398380, US4308711, US4295904, US4266666, US4246288, US4216050, US4210246, US4201030, US4069348, US3482778, US2014331611, US2013269166, US2011111099, US2011024439, US2010287893, US2010258569, US2010237088, US2010170205, US2010024360, US2010024359, US2010011718, US2009320411, US2009272073, US2009191296, US2009090084, US2009071100, US2009007524, US2009000252, US2008128424, US2008104822, US2007259142, US2007254074, US2007164489, US2007138192, US2007116805, US2007012708, US2006246185, US2006230708, US2006183383, US2006094622, US2005246825, US2005233036, US2004206653, US2004062838, US2004060262, US2003185947, US2003170745, US2003170359, US2003170358, US2003152679, US2003124221, US2003113415, US2003096042, US2003077005, US2003072852, US2001017947, NL8303717, JP60077829, JP5949152, JP2013244976, GB2238997, GB2238997, GB2201400, GB2130166, FR2635253, FR2559740, FR2536039, EP2384982, EP1437301, EP1167226, EP0957042, EP0957042, EP0810162, EP0672349, EP0439221, EP0232931, DE3925746, DE3341072, DE2834076, DE19824976, DE102005033194, AU625149,

Abstract:
Source: US3972155A A method for **packaging** is disclosed including forming a semi-rigid plastic sheet into a receptacle, filling the formed receptacle with the product to be **packaged** and forming a semi-rigid plastic sheet into a recloseable **cover** over the **packaged** product.



426) Family number: 6091407 (NL7211267A)

Title:	HEATABLE FOOD PACK - USING **CONTAINER** MADE OF METAL FOIL WITH INNER PROTECTIVE COATING OF HEAT RESISTANT POLYIMIDE OR POLYIMIDAZOLE RESIN
Priority:	NL19720011267 19720817

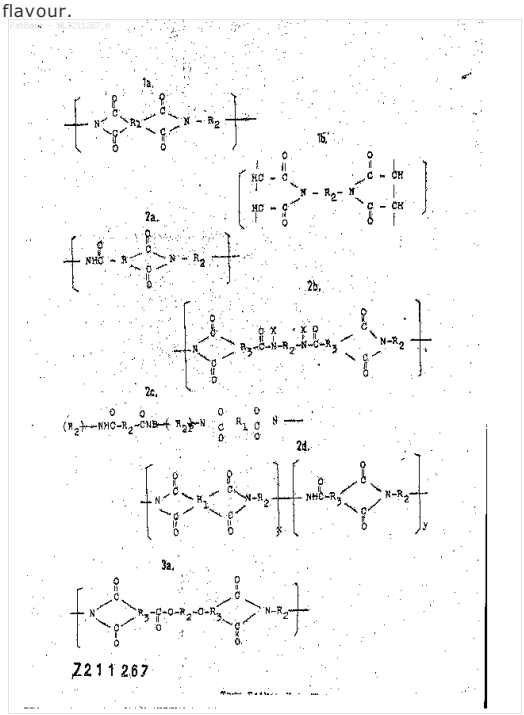
Family:

Publication number	Publication date	Application number	Application date
NL174820 B	19840316	NL19720011267	19720817
NL174820 C	19840816	NL19720011267	19720817
NL7211267 A	19740219	NL19720011267	19720817

Probable Assignee:	TOYO SEIKAN KAISHA LTD
Assignee(s):(std):	TOYO SEIKAN KAISHA LTD
Assignee(s):	TOYO SEIKAN KAISHA LIMITED TE TOKIO
International class (IPC 8-9):	A47J43/00 B65D65/40 (Advanced/Invention); A47J43/00 B65D65/40 (Core/Invention)
International class (IPC 1-7):	A47J43/00 B65D65/40 B65D81/34
CPC:	A47J43/00 B65D65/40
European class:	A47J43/00 B65D65/40

Classification Explorer

Abstract:
Source: NL7211267A Heatable food pack consists of a food pdt. enclosed in a **container** made of a metal foil, internally with a protective layer of a heat resistant polyimide or polyimidazole resin, with a thickness of 5-500 mu. Can be heated by contacting directly with a flame. Good preservation of the food, and maintenance of flavour.



427) Family number: 19050594 (US3817416A)

Title: SAFETY **CLOSURE** CAP FOR **CONTAINERS**

Priority: US19720277397 19720802

Family:

Publication number	Publication date	Application number	Application date
CA962627 A1	19750211	CA19720152851	19720929
DE2246879 A1	19740221	DE19722246879	19720923
DE2246879 B2	19760513	DE19722246879	19720923
DE2246879 C3	19770120	DE19722246879	19720923
DE7235159 U	19770421	DE19720035159U	19720923
FR2194620 A1	19740301	FR19720042247	19721128
FR2194620 B1	19760130	FR19720042247	19721128
GB1408797 A	19751008	GB19720058437	19721218
IT970182 A	19740410	IT19720031251	19721102
JP49044872 A2	19740427	JP19720122375	19721206
US3817416 A	19740618	US19720277397	19720802

Probable Assignee: COSTA ALLAN WEST ISLIP N Y V ST A

Assignee(s):(std)**:** COSTA ALLAN ; COSTAU ALLAN ; COSTAU ALLAN US ; COSTA ALLAN WEST ISLIP N Y V ST A ; COSTA A

Assignee(s): COSTA A US

Inventor(s):(std)**:** COSTA A ; COSTA ALLAN ; COSTA ALLAN WEST ISLIP NY

Inventor(s): COSTA A US

International class (IPC 8-9): B65D41/04 B65D47/12 B65D50/04 B65D55/08 (Advanced/Invention); B65D41/04 B65D47/12 B65D50/00 B65D55/02 (Core/Invention)

International class (IPC 1-7): A61J1/00 B65D41/00 B65D41/04 B65D41/32 B65D41/34 B65D55/00 B65D55/02 B65D55/06 B65D55/08 B65D55/12 B67B

CPC: B65D47/122 B65D50/041 B65D55/089

European class: B65D47/12B B65D50/04B B65D55/08F

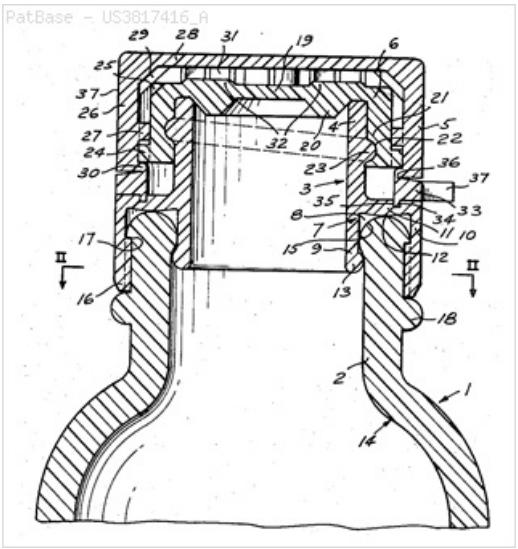
US class: 215/213 215/220 215/9 222/153.07

Classification Explorer

Cited documents: US3692199 A, US3650426 A, US3489319 A, US3372825 A, US2964207 A, GB839116 A, FR1407057 A, CH480990 A, CH480990, CH464722 A, CH464722,

Forward Citations: WO9525042, WO9113812, WO14019042, WO11070581, WO06117505, US9676525, US9669974, US9033169, US8534476, US7243807, US5971182, US5785209, US5769277, US5755360, US5564580, US5562218, US5549389, US5482176, US5398829, US5383564, US5230433, US5033647, US5004126, US4948003, US4936474, US4865209, US4609114, US4371089, US4165813, US4076140, US3939788, US3938710, US3907146, US3877598, US2015166229, US2013206136, US2011139742, US2008173647, US2008105644, US2005040131, US2004169000, JP59106855, JP5681033, JP2012224365, GB2492586, GB2143218, GB2142612, GB2141697, GB2137599, EP0650902, EP0427009, EP0112683, EP0105000, EP0105000, DE8709222, DE3416179, DE3246013, DE3246013, DE2811092, DE20018710, AU679558,

Abstract:
Source: US3817416A There is disclosed a safety **container** **closure** attachable to the neck of a **container** or to a tubular base secured to the **container**. The safety **closure** comprises a screw cap which can be screwed off or on and constitutes the **closure** proper and a **cover** cap rotatably fitted upon the screw cap completely overlying the screw cap to prevent direct access to the same. The **cover** cap is normally biased into a position spaced apart from the screw cap so that rotation of the **cover** cap has no effect on the screw cap but can be axially depressed into a position in which it is coupled to the screw cap. With the **cover** cap in this coupling position, rotation of the **cover** cap causes rotation of the screw cap also thereby permitting **opening** or closing of the **container**.



428) Family number: 1140833 (US3884012A)

Title: METHOD AND APPARATUS FOR THE PACKING UNDER ASEPTIC CONDITIONS OF STERILE GOODS INTO **CONTAINERS**

Priority: SE19720010418 19720811 SE19720010419 19720811 SE19720010419 19720811

Family:

Publication number	Publication date	Application number	Application date
AU197358199 A1	19750123	AU19730058199	19730718
AU197358200 A1	19750123	AU19730058200	19730718
CA1000603 A1	19761130	CA19730178494	19730810
CA987579 A1	19760420	CA19730177186	19730724
CH567963 A	19751015	CH19730011173	19730731
CH567964 A	19751015	CH19730011174	19730731
DE2339498 A1	19740221	DE19732339498	19730803
DE2339517 A1	19740221	DE19732339517	19730803
DE2339517 B2	19780524	DE19732339517	19730803
DE2339517 C3	19790111	DE19732339517	19730803
FR2195550 A1	19740308	FR19730029296	19730810
FR2195550 B1	19770513	FR19730029296	19730810
FR2195551 A1	19740308	FR19730029295	19730810
FR2195551 B1	19770513	FR19730029295	19730810
GB1394917 A	19750521	GB19730033890	19730717
GB1400112 A	19750716	GB19730033889	19730717
IT995093 A	19751110	IT19730027288	19730730
IT995094 A	19751110	IT19730027289	19730730
JP1007067 C3	19800731	JP19730089914	19730810
JP49044882 A2	19740427	JP19730089914	19730810
JP49044883 A2	19740427	JP19730089915	19730810
JP54035542 B4	19791102	JP19730089914	19730810
SE423517 B	19820510	SE19720010418	19720811
SE423517 C	19820819	SE19720010418	19720811
SE423808 B	19820607	SE19720010419	19720811
SE423808 C	19820916	SE19720010419	19720811
SU607541 D	19780515	SU19731957437	19730810
US3884012 A	19750520	US19730380573	19730719
US3911640 A	19751014	US19730380574	19730719

Probable Assignee: TETRA PAK AB

Assignee(s):(std)**:** GEORG ERNSTSSON ; HANS RAUSING ; KJELL MARTENSSON ; TETRA PAK DEV ; TETRA PAK INT

Assignee(s): TETRA PAK INT AB LUND SCHWEDEN ; TETRA PAK DEVELOPPEMENT SA CH ; TETRA PAK INTERNATIONAL AB ; TETRA PAK INTERNEJSHIL AB FA ; TETRA PAK INTERNATIONAL AB LUND SCHWEDEN ; TETRA PAK INT AB ; ERNSTSSON GEORG ; TETRA PAK AB ; TETRA PAK DEVELOPPEMENT SA ; TETRA PAK DEVELOPMENT SA ; TETRA PAK DEVELOPPEMENT S A ; TETRA PAK DEVELOPMENT AB ; MARTENSSON KJELL ; RAUSING HANS

Inventor(s):(std)**:** RAUSING HANS A ; RAUSING H A ; MARTENSSON KJELL H ; MARTENSSON K H ; MAARTENSSON KJELL ; ERNSTSSON GEORG ; ERNSTSSON GEORG E ; ERNSTSSON E G ; RAUSING KHANS ; MERTENSSON KELL ; MARTENSSON KJELL ; RAUSING HANS

Inventor(s): E G ERNSTSSON ; RAUSING HANS LUND SCHWEIZ ; H A RAUSING ; GEORG ERNSTSSON ; K H MARTENSSON ; KJELL MARTENSSON ; KHANS RAUSING SW ; KELL MERTENSSON SW ; HANS RAUSING ; GEORG ERNSTSSON SW

International class (IPC 8-9): A61L2/10 B29C51/18 B29C51/24 B65B31/02 B65B5/02 B65B55/02 B65B55/04 B65B55/06 B65B55/10 B65B9/04 B67C7/00 (Advanced/Invention);
A61L2/10 B29C51/18 B65B55/02 B65B55/04 B65B9/00 B67C7/00 (Core/Invention)

International class (IPC 1-7): B65B31/02 B65B39/00 B65B41/12 B65B47/00 B65B47/04 B65B47/10 B65B55/00 B65B55/02 B65B55/04 B65B55/06 B65B55/08 B65B55/10 B65B55/18 B65B55/24 B65B61/06 B65B7/00 B65B9/04

CPC: A61L2/10 B65B55/025 B67C7/0073 B29C51/18 B29C51/24 B29C2791/005 B65B55/103

European class: A61L2/10 B29C51/18 B29C51/24 B65B55/02C B65B55/10B B67C7/00C L29C791/00E2

US class: 53/110 53/167 53/210FC 53/426 53/433 53/451 53/453 53/471 53/511 53/554 53/559

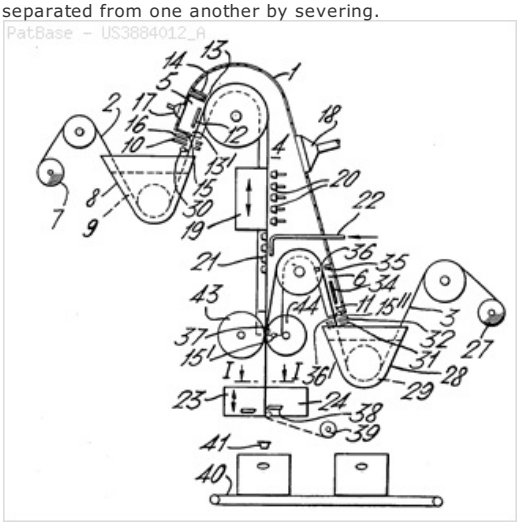
Classification Explorer

Cited documents: US3820300 A, US3789569 A, US3783581 A, US3766709 A, US3692468 A, US3583132 A, US3583129 A, US3530641 A, US3513627 A, US3481100 A, US3478489 A, US3383831 A, US3267639 A, GB1093659 A, FR2055194 A5, FR1597237 A, FR1592063 A, FR1488827 A, FR1473765 A, FR1199525 A, FR1145675 A, DE2164500 A1,

Forward Citations: WO9903667, WO9839214, WO8805013, WO16186502, WO13055884, WO10103555, WO10064125, WO10064125, WO08049876, WO07142569, US9637251, US9434527, US9162780, US9156576, US9102097, US8960242, US8663080, US8550799, US8181431, US8176711, US8112972, US8083512, US8071009, US8029725, US7992597, US7975453, US7874129, US7726352, US7707807, US7669390, US7611011, US7490453, US7325368, US7217033, US6996951, US6962032, US6846305, US6764567, US6748720, US6692684, US6662531, US6638476, US6562281, US6468377, US6457299, US6203535, US6198106, US6165161, US6134866, US5944709, US5928213, US5910138, US5779894, US5759218, US5671591, US5477660, US5377475, US5299408, US5069017, US5008076, US4996824, US4944132, US4835937, US4793121, US4693052, US4633645, US4597242, US4543770, US4503656, US4494357, US4424188, US4375145, US4287702, US4224779, US4208852, US4165594, US4152464, US4035981, US3972153, US2015152660, US2015096268, US2013118116, US2012073243, US2012036814, US2011113729, US2011071009, US2010205903, US2010189831, US2010154360, US2009317506, US2009208369, US2009173039, US2009145089, US2007114690, US2006225809, US2006168909, US2005252176, US2005223677, US2005217211, US2004068960, US2003101684, US2003085147, US2003000632, US2002070130, TWI590995, RU2616817, RU2519866, NL2014837, JP6157487, JP60172666, JP57174688, JP57037387, JP55064028, JP55063807, JP54018189, JP53116701, JP53116102, JP53091889, JP4971438, JP3595674, JP2015500774, JP2012520116, JP2009538796, JP11059629, ITTO20080896, FR2907684, FR2766121, FR2672869, FR2600560, FR2442124, EP2032445, EP1122170, EP0996530, EP0727357, EP0479010, EP0099605, EP0095812, DE3923539, DE2760008, DE19507639, DE19505197, DE102005052826, DE10028009, CN102300774, AU727807, AU727807,

Abstract:

Source: US3884012A A method and apparatus for packing sterile goods into **containers** under aseptic conditions wherein a thermoformable web is introduced into one end of a processing tunnel within which sterile conditions are maintained. As the web passes through the tunnel it is drawn into a series of end-to-end connected **open**-top **containers**. A second web is applied to the first web along the corresponding opposite longitudinal edge portions to form a tube which is then filled with the material to be **packaged** so that the material fills the drawn **container** spaces. The two webs are then further joined together by **sealing** along zones closed in themselves around the **container openings** so that each **container** becomes closed. After the two webs pass out of the opposite end of the tunnel, the filled **containers** are then separated from one another by severing.



429) Family number: 1511609 (US3838550A)

Title: METHOD AND APPARATUS FOR **PACKAGING**

Priority: CA19730177963 19730802 CA19760262256 19760929 US19740282758 19740822 US19720282758 19720822

Family:

Publication number	Publication date	Application number	Application date
AU197359136 A1	19750213	AU19730059136	19730810
AU476369 B2	19760916	AU19730059136	19730810
CA1017723 A1	19770920	CA19730177963	19730802
CA1028292 A1	19780321	CA19760262256	19760929
CA1028292 A2	19780321	CA19760262256	19760929
DE2341911 A1	19740314	DE19732341911	19730818
DE2341911 C2	19830728	DE19732341911	19730818
FR2196937 A1	19740322	FR19730030379	19730821
FR2196937 B1	19780210	FR19730030379	19730821
GB1432187 A	19760414	GB19730038998	19730817
GB1432537 A	19760422	GB19750020822	19730817
IT1000043 A	19760330	IT19730051879	19730806
JP49086190 A2	19740817	JP19730091000	19730815
JP52040278 B4	19771011	JP19730091000	19730815
JP910248 C3	19780614	JP19730091000	19730815
NL156979 B	19780615	NL19730011485	19730821
NL7311485 A	19740226	NL19730011485	19730821
US3838550 A	19741001	US19720282758	19720822
US3976196 A	19760824	US19740490362	19740722

Probable Assignee: OWENS ILLINOIS PLASTIC PRODUCTS INC A CORP OF DE

Assignee(s):(std)**:** OWENS ILLINOIS INC

Assignee(s): OWENS ILLINOIS INC 43666 TOLEDO OHIO US ; OWENS ILLINOIS INC TOLEDO OHIO VER ST V AM ; OWENS ILLINOIS INC US ; OWENS ILLINOIS PLASTIC PRODUCTS INC ; SWEETHEART CUP CO INC ; OWENS ILLINOIS PLASTIC PRODUCTS INC A CORP OF DE ; BANKERS TRUST CO ; BANKERS TRUST CO COLLATERAL AGENT AS ; MUELLER MARTIN ; OWENS ILLINOINS INC US ; OWENS ILLINOIS

Inventor(s):(std)**:** MUELLER M ; MUELLER MARTIN

Inventor(s): MUELLER MARTIN WONDERLAKE ILL ; MUELLER MARTIN WONDERLAKE ILL US ; MUELLER M US ; MARTIN MUELLER

International class (IPC 8-9): B65B43/52 B65B43/54 B65B7/16 B65B7/28 B65D21/00 B65D8/02 (Advanced/Invention); B65B43/42 B65B7/16 B65B7/28 B65D21/00 B65D8/00 (Core/Invention)

International class (IPC 1-7): B65B1/06 B65B3/00 B65B3/02 B65B3/06 B65B43/44 B65B43/52 B65B43/54 B65B51/16 B65B61/06 B65B7/16 B65B7/28 B65D21/00 B65D71/00 B65D75/40 B65D8/02 B65D85/62

CPC: Y10S206/82 B65B7/164 B65B43/52 B65B43/54 Y10T156/1734 B29C65/18 B29C65/305 B29C66/112 B29C66/131 B29C66/24221 B29C66/53461 B29C66/72321 B29C66/73921 B29C66/81457 B29C66/8167 B29C66/83411 B29C66/83417 B29C66/8432 B29C66/849 B29C66/91212 B29C66/91231 B29C66/91421 B29C66/961 B29C2793/0045 B29C2793/009 B29K2705/02 B29C66/8161 B29C66/82265

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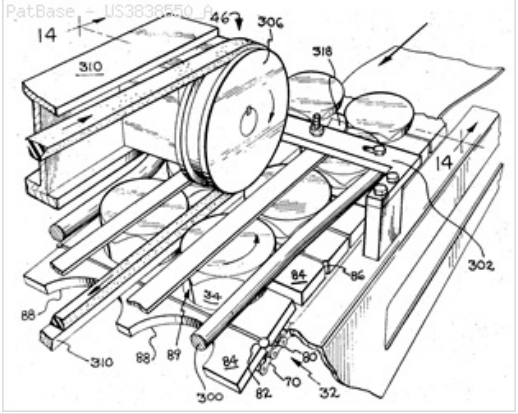
US class: 100/332 156/552 156/583.1 206/484 206/526 206/820 219/244 229/120.01 229/125.35 53/3.9 53/329.4 53/39 53/478 53/488

Classification Explorer

Cited documents: US3738082 A, US3590554 A, US3503493 A, US3443741 A, US3440794 A, US3054679 A, US2984058 A, US2197739 A, DE1918037 A1, DE1486024 A1, DE1411995 B, DE1086621 B,

Forward Citations: WO9011035, WO04074103, USD709386, USD579769, USD575148, US8833043, US8777013, US7510756, US7411162, US7075035, US6822203, US6291037, US5993942, US5511360, US5490899, US5249410, US5182896, US4989393, US4966296, US4819412, US4799599, US4742666, US4677812, US4608809, US4282698, US4184310, US4065908, US2016201899, US2015225099, US2015056562, US2011100986, US2010018969, US2009039079, US2007194006, US2007151212, US2007020362, US2006091127, US2004159080, US2004086025, US2004083682, US2004056019, US2004007554, US2003097824, US2003035871, JP61000103, GB2287448, GB2225566, GB2216864, GB2208622, GB2208622, GB2142266, GB2121933, FR2592856, EP3235743, EP1239225, EP0919487, DE3928654, CN103359328,

Abstract:
Source: US3838550A A method and apparatus for **packaging** products in **containers** while the **containers** are continuously moving along a path is disclosed herein. The **containers** are sequentially dropped from a nested stack towards an apertured conveyor that defines the path for the **containers** and a negative pressure is produced below the conveyor to assist in drawing the **containers** into the apertures of the conveyor. The conveyor moves the **containers** to a filling station where the product is flowed into the **containers** at several different locations, so that the **containers** are filled in stages while being moved by the conveyor. The filled **containers** then progress to a **cover** applying station and are preferably arranged in at least a pair of rows with a continuous web of heat **sealable** **cover** film heat **sealed** to the filled **containers** at the **cover** applying station.



430) Family number: 6918256 (US3793940A)

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Title: APPARATUS FOR COOKING FOOD IN HOT NON-AQUEOUS LIQUIDS UNDER PRESSURE

Priority: US19690881230 19691201 US19730367810 19730607 US19750541593 19750116 US19730367811 19730607 US19730412624 19731105

Family:

Publication number	Publication date	Application number	Application date
BE806914 A	19740506	BE19730137405	19731105
US3793940 A	19740226	US19690881230	19691201
US3853044 A	19741210	US19730367810	19730607
US3861286 A	19750121	US19730367811	19730607
US3977434 A	19760831	US19750541593	19750116
US4110481 A	19780829	US19760712747	19760809

Probable Assignee: ALBRIGHT CHARLES J

Assignee(s):(std)**:** CHEMETRON CORP ; FITCH SR CLIFFORD E ; FITCH JR CLIFFORD E ; FITCH C ; ALBRIGHT C ; ALBRIGHT CHARLES J

Assignee(s): ALBRIGHT CHARLES JERE ; ALBRIGHT C US ; FITCH C US ; CHEMETRON CORP US ; CHEMETRON CORP 111 EAST WACKER DRIVE CHICAGO ILLIN ; CHEMETRON CORP 111 EAST WACKER DRIVE CHICAGO ILLINOIS E U A

Inventor(s):(std)**:** ALBRIGHT C ; FITCH C ; FITCH SR CLIFFORD E ; FITCH JR CLIFFORD E ; FITCH C E ; ALBRIGHT CHARLES JERE ; ALBRIGHT C J

Inventor(s): ALBRIGHT C US ; CJ ALBRIGHT ; CE FITCH ; C J ALBRIGHT ; C E FITCH ; FITCH C US

International class (IPC 8-9): A47J27/08 (Advanced/Invention); A47J27/08 (Core/Invention)

International class (IPC 1-7): A23L1/00 A23L1/01 A47J27/14 A47J37/12 F16K11/083

CPC: Y10T137/86558 A47J27/0817 Y10T137/86871

European class: A47J27/08R

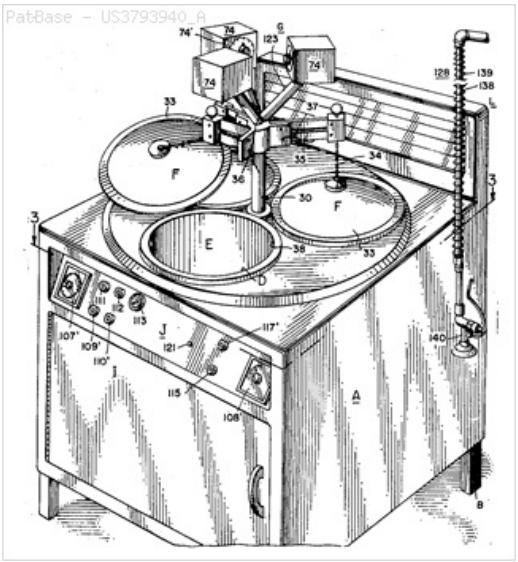
US class: 134/167R 137/625.18 137/625.47 426/438 426/523 99/327 99/330 99/332 99/344 99/408 99/416 993/270

Classification Explorer

Cited documents: US3635722 A, US3613550 A, US3610133 A, US3608472 A, US3563158 A, US3466997 A, US3463078 A, US3431835 A, US3364947 A, US3364845 A, US3336859 A, US3308840 A, US3280722 A, US3259521 A, US3194662 A, US3187664 A, US2827379 A, US2532639 A,

Forward Citations: WO8605961, WO09026022, USRE33712, US9897080, US9795250, US9644761, US9638179, US9387440, US9227780, US8707857, US8468893, US7870870, US6875959, US6446545, US6269737, US5896810, US5758569, US5546849, US4927653, US4872474, US4870985, US4688475, US4597325, US4569371, US4505193, US4502372, US4325491, US4273991, US2014150872, US2013037140, US2012247214, US2009050221, US2003003209, DE3438910,

Abstract:
Source: US3793940A The essential concept of this invention basically involves the improved structuring and operative arrangement of a multiple-receptacle apparatus for the pressurized cooking of food in hot, non-aqueous liquid, wherein the food is inserted into and removed from a receptacle cooking compartment when it is essentially drained of the hot liquid and free of pressure.



431) Family number: 30353573 (US3795081A)

© PatBase

Title: PROCESS FOR CONTINUOUSLY FORMING COMPARTMENTED **PACKAGES**

Priority: MX19730139404 19730815 US19720281166 19720816 US19720303054 19721102 US19730417299 19731119

Family:

Publication number	Publication date	Application number	Application date
AU197359221 A1	19750220	AU19730059221	19730814
AU197464176 A1	19750710	AU19740064176	19740104
CA1016503 A1	19770830	CA19730178719	19730813
CA996852 A1	19760914	CA19730178697	19730813
CA996853 A1	19760914	CA19740190870	19740124
DE2341384 A1	19740228	DE19732341384	19730816
DE2400410 A1	19750528	DE19742400410	19740105
DE7329743 U	19740228	DE19730297430	19730816
FR2196635 A5	19740315	FR19730029909	19730816
FR2324515 A1	19770415	FR19740001177	19740114
FR2324515 B1	19851031	FR19740001177	19740114
GB1446007 A	19760811	GB19730038569	19730815
GB1451872 A	19761006	GB19740000673	19740107
JP1076931 C3	19811225	JP19730090628	19730814
JP1137744 C3	19830228	JP19740006688	19740114
JP49052089 A2	19740521	JP19730090627	19730814
JP49081189 A2	19740805	JP19730090628	19730814
JP50101185 A2	19750811	JP19740006688	19740114
JP56018444 B4	19810428	JP19730090628	19730814
JP56020439 B4	19810513	JP19730090627	19730814
JP57027005 B4	19820608	JP19740006688	19740114
MX149306 A	19831014	MX19730176545	19730815
NO140886 B	19790827	NO19730003243	19730815
NO140886 C	19791205	NO19730003243	19730815
NO142391 B	19800505	NO19740000046	19740108
NO142391 C	19800813	NO19740000046	19740108
NO740046 A	19750521	NO19740000046	19740108
PH10305 A	19761110	PH19730014920	19730815
PH11265 A	19771102	PH19740015408	19740114
PL90779 P	19770131	PL19740168672	19740209
US3795081 A	19740305	US19720303054	19721102
US3861522 A	19750121	US19720281166	19720816
US3918235 A	19751111	US19730417299	19731119
USB417299 I	19750128	US19730417299	19731119
ZA7305543 A	19740925	ZA19730005543	19730814
ZA7400272 A	19741127	ZA19740000272	19740115
ZM1274 A	19740923	ZM19740000012	19740122
ZM12773 A	19740521	ZM19730000127	19730815

Probable Assignee: DU PONT

Assignee(s):(std)**:** DU PONT DE NEMOURS AND COMPANY E I ; DU PONT DE NEMOURS AND CY ; DU PONT DE NEMOURS AND CY US ; DU PONT ; DU PONT DE NEMOURS AND CO E I ; DU PONT DE NEMOURS E I AND CO ; E I DU PONT DE NEMOURS AND COMPANY

Assignee(s): E I DU PONT DE NEMOURS AND CO ; E I DU PONT DE NEMOURS AND CO WILMINGTON DEL V ST A ; LLEWELLYN WALTER E ; WILLIS FRANK M ; EI DU PONT DE NEMOURS AND CO ; DU PONT DE NEMOURS EI ; DU PONT DE NEMOURS EI AND CO ; E I DU PONT DE NEMOURS AND CO US ; E I DU PONT DE NEMOURS AND CO WILMINGTON DEL V ST ; DU PONT DE NEMOURS AND CO EI ; DU PONT DE NEMOURS CO E I ; BROWN THEODORE E

Inventor(s):(std)**:** BROWN THEODORE E ; FRANK MARSDEN WILLIS ; LLEWLLYN WALTER ELISHA ; WILLIS FRANK MARSDEN ; WILLIS FRANK M ; WILLIS F M ; WILLIS F ; LLEWELLYN WALTER ELISHA ; LLEWELLYN WALTER E ; LLEWELLYN W ; BROWN THEODORE EDWARD JR ; BROWN THEODORE E JR ; BROWN T ; BROWN JUN THEODORE EDWARD ; BROWN JR THEODORE E ; BROWN JR T E ; THEODORE EDWARD BROWN JR ; WALTER ELISHA LLEWELLYN ; WALTER ELISHA LLEWLLYN

Inventor(s): WILLIS F US ; WILLIS FRANK MARSDEN HEDGESVILLE W VA V ST A ; BROWN JUN ; MARSDEN WILLIS FRANK ; BROWN JUN THEODORE EDWARD MICKLETON N J ; BROWN T US ; EDWARD BROWN JUN ; EDWARD BROWN JUN THEODORE ; ELISHA LLEWELLYN WALTER

International class (IPC 8-9): B65B29/10 B65B9/12 B65B9/20 B65D75/20 B65D77/08 B65D81/32 C04B40/06 E21D20/00 E21D20/02 E21D21/00 (Advanced/Invention);
F16B13/14 (Advanced/Non-invention);
B65B29/00 B65B9/10 B65D75/04 B65D77/00 B65D81/32 C04B40/00 E21D20/00 E21D21/00 (Core/Invention);
F16B13/00 (Core/Non-invention)

International class (IPC 1-7): B29D23/12 B65B1/02 B65B29/10 B65B3/02 B65B31/04 B65B9/06 B65B9/08 B65B9/12 B65B9/20 B65D31/12 B65D75/20 B65D77/08 B65D81/32 B65D83/00 B65H54/00 B65H55/00 E21D20/02

CPC: B65B29/10 B65D81/3261 C04B40/065 E21D20/026 F16B13/143

European class: B65B29/10 B65D81/32H C04B40/06D2 E21D20/02D2 R16B13/14C2

US class: 206/219 206/223 383/40 493/192 493/196 493/202 53/2.8 53/28 53/451 53/474 53/551

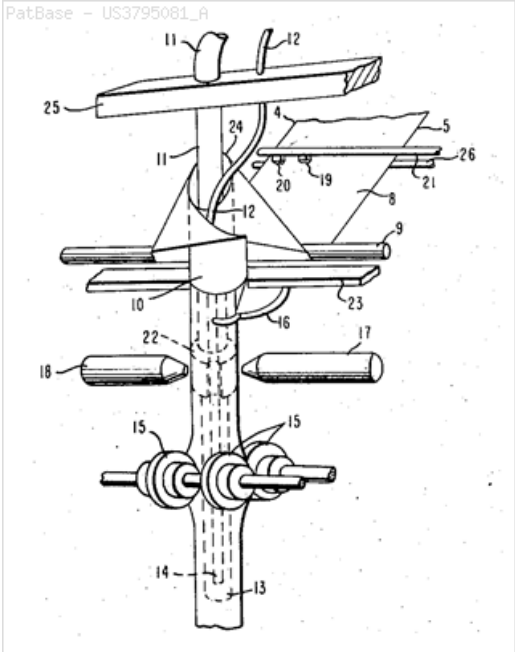
Classification Explorer

Cited documents: US3737027 A, US3608709 A, US3474898 A, US3380226 A, US3302410 A, US3266671 A, US3261494 A, US3145838 A, US3095291 A, US3054703 A, US3028000 A, US3000495 A, US2913861 A, US2771724 A, US2609880 A, US2195740 A, US2040953 A, FR2105167 A1,

Forward Citations: WO9013485, WO8600660, WO15197646, WO15072830, WO12058341, WO03101849, WO03101848, US9738405, US9586377, US9376912, US9328610, US8685303, US8567437, US8313006, US8281956, US8202024, US8172109, US7958697, US7775745, US7775399, US7736738, US7726098, US7681377, US6868650, US6641306, US6622459, US6287612, US5407278, US5397202, US5029430, US4964259, US4846278, US4829745, US4735509, US4679380, US4651875, US4517787, US4495748, US4437853,

US4341301, US4301652, US4291799, US4282812, US4279340, US4272898, US4239105, US4227612, US4221290, US4126005, US4103771, US4103473, US4019630, US4009778, US4007831, US3992854, US2014206515, US2014020329, US2013336726, US2012243946, US2012114428, US2012018091, US2011297676, US2011100470, US2010252953, US2010183379, US2010147856, US2010027918, US2009272761, US2009223173, US2009179045, US2008274239, US2008273821, US2008271418, US2008261792, US2007017832, US2006175348, US2005134104, US2004040258, US2003223653, US2003084914, JP60179142, JP55159299, JP54165225, JP52015105, ITTV20090118, GB2389833, FR2656360, FR2457758, FR2456606, FR2445805, FR2318800, FR2318800, EP2633158, EP2106366, EP1988033, EP1988021, EP1507713, EP0340657, DE2856735, DE2835287, DE2835287, DE102006056865, AU2003228951,

Abstract:
Source: US3795081A A series of multi-compartmented **packages** is produced continuously by forming a web of film, e.g., biaxially oriented, heat-set polyethylene terephthalate, into a continuously advancing convoluted tube having a partially single-ply and partially double-ply wall, **sealing** the inner to the outer ply so as to form at least two linear junctures, one adjacent the inner edge and one adjacent the outer edge of the web, thereby forming at least two adjacent compartments with the inner ply common to two compartments, feeding different fluent materials to the different compartments, constricting the loaded tube at spaced intervals and applying a pair of encircling **closure** means to the constricted areas, and severing the tube between the pair of **closure** means.



432) Family number: 1089650 (US3830265A)

Title: METHOD AND APPARATUS FOR FILLING A **CONTAINER**

Priority: US19720280225 19720814

Family:

Publication number	Publication date	Application number	Application date
CA991138 A1	19760615	CA19730178463	19730809
DE2340613 A1	19740228	DE19732340613	19730810
GB1429990 A	19760331	GB19730038172	19730813
JP49086181 A2	19740817	JP19730090604	19730814
US3830265 A	19740820	US19720280225	19720814

Probable Assignee: AMERICAN NATIONAL CAN CO

Assignee(s):(std)**:** AMERICAN CAN CO

Assignee(s): AMERICAN CAN CO US ; AMERICAN CAN COMPANY ; AMERICAN CAN PACKAGING INC ; AMERICAN NATIONAL CAN CO ; MATEJEK JOHN M

Inventor(s):(std)**:** MATEJEK J ; MATEJEK JOHN M ; MATEJEK JOHN MICHAEL

Inventor(s): MICHAEL MATEJEK JOHN ; MATEJEK J US

International class (IPC 8-9): B65B3/18 B67C3/08 B67C3/26 B67C3/28 (Advanced/Invention); B65B3/00 B67C3/02 (Core/Invention)

International class (IPC 1-7): B65B3/18 B67C3/06 B67C3/08 B67C3/10 B67C3/26

CPC: Y10T137/2984 B67C3/08 B67C3/26 B67C3/2614 B67C2003/2657

European class: B67C3/08 B67C3/26 B67C3/26C L67C3/26N

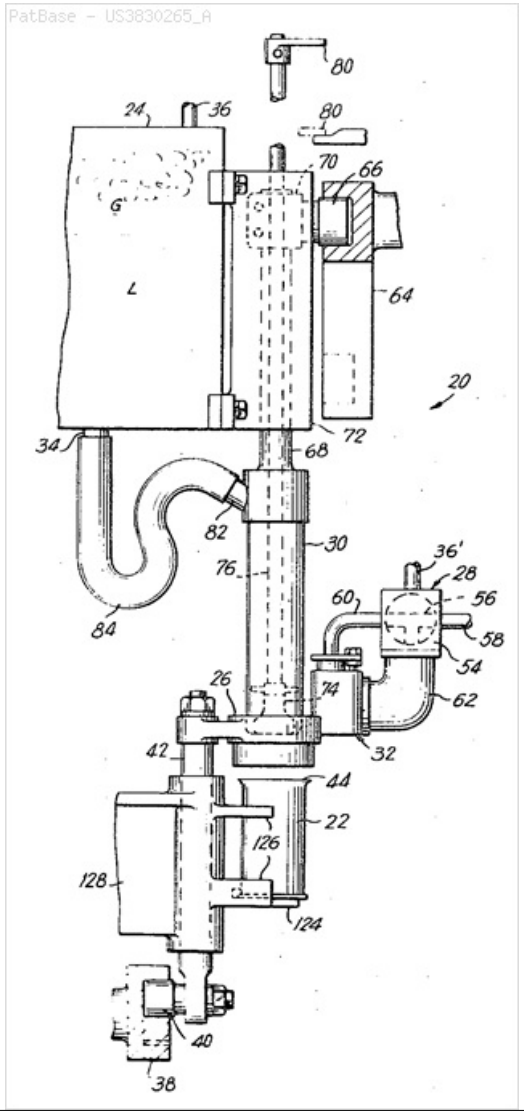
US class: 137/170.1 141/0.6 141/302 141/374 141/39 141/48 141/6

Classification Explorer

Cited documents: US968898 A, US3720242 A, US3515180 A, US3460590 A, US3460589 A, US3380488 A, US2973267 A, US2770263 A, US1779739 A,

Forward Citations: WO8703572, WO12167764, WO08089843, US9714161, US8517065, US6543494, US5390832, US5244117, US5150740, US5145008, US4986318, US4750533, US4436124, US4162601, US3951186, US2015013832, US2013068347, US2010126624, JP5829332, JP2014516015, GB2192622, GB2192622, EP2703334, CN103582606, CN103582606,

Abstract:
Source: US3830265A A method and apparatus for filling a **container** with liquid whereby the **container** to be filled is purged of air, **sealed** and then pressurized with a counterpressure gas. A plunger containing filling liquid is introduced into the **container** and the liquid transferred from the plunger to the **container** by means of a valve in the plunger operable subsequent to the pressurization of the **container**.



433) Family number: 27466888 (US3904104A)

Title: POLYETHYLENE TEREPHTHALATE/PAPERBOARD BLANK AND **CONTAINER** FORMED FROM SUCH BLANK

Priority: CA19740178700 19740905 US19720281943 19720818 US19740468538 19740509 US19740457382 19740402 US19740468536 19740509

Family:

Publication number	Publication date	Application number	Application date
CA995118 A1	19760817	CA19730178700	19730813
DE2341696 A1	19740228	DE19732341696	19730817
DE7330156 U	19740404	DE1973030156U	19730817
FR2196248 A1	19740315	FR19730029857	19730816
FR2196248 B1	19770225	FR19730029857	19730816
GB1430393 A	19760331	GB19730038994	19730817
SE409887 B	19790910	SE19730011246	19730817
US3904104 A	19750909	US19740468538	19740509
US3924013 A	19751202	US19720281943	19720818
US3939025 A	19760217	US19740457382	19740402
US3967998 A	19760706	US19740468536	19740509
USB281943 I	19750128	US19720281943	19720818

Probable Assignee: DU PONT

Assignee(s):(std)**:** DU PONT

Assignee(s): DU PONT DE NEMOURS AND CY ; DU PONT DE NEMOURS AND CY US ; DU PONT DE NEMOURS CO E I ; E I DU PONT DE NEMOURS AND CO ; E I DUPONT DE NEMOURS AND CO ; E I DU PONT DE NEMOURS AND COMPANY ; KANE WILLIAM P ; EI DU PONT DE NEMOURS AND CO

Inventor(s):(std)**:** KANE W ; KANE W P ; KANE WILLIAM P ; KANE WILLIAM PAUL ; W P KANE

Inventor(s): PAUL KANE WILLIAM

International class (IPC 8-9): A21B3/13 A21B3/15 A47J36/02 B29C47/00 B32B27/00 B32B27/10 B65D5/24 B65D65/40 D21H19/28 (Advanced/Invention);
A21B3/00 A47J36/02 B29C47/00 B32B27/00 B32B27/10 B65D5/20 B65D65/40 D21H19/00 (Core/Invention)

International class (IPC 1-7): A21B3/15 B29C27/14 B29F3/00 B32B27/10 B32B27/36 B32B29/00 B32B29/04 B32B29/06 B32B31/00 B65D5/00 B65D5/20 B65D5/24 B65D81/34 D21H1/02

CPC: Y10S229/903 B29C47/0021 A21B3/131 A47J36/022 B29C47/00 D21H19/28 B32B27/00 Y10T156/1049 Y10T428/3179 Y10T428/31906 B32B27/10 B32B27/36 B32B38/0036 B32B2367/00 B65D5/248 B32B2307/702 B32B2309/02 B32B2439/02

European class: A21B3/13B A47J36/02B B29C47/00 B32B27/00 B65D5/24E D21H19/28

US class: 156/226 156/244 156/244.23 156/322 219/725 229/171 229/180 229/3.5 229/5.84 229/903 426/106 426/127 426/234 426/398 426/407 426/523 427/316 428/481 428/514

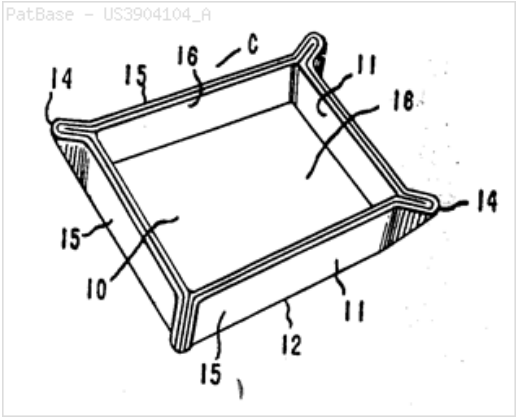
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Cited documents: US3756495 A, US3750873 A, US3737354 A, US3716369 A, US3640788 A, US3619215 A, US3550835 A, US3531041 A, US3515626 A, US3498865 A, US3402086 A, US3382295 A, US3372148 A, US3323965 A, US3316102 A, US3238284 A, US3178017 A, US2961365 A, US2495807 A, US2465319 A, US2373730 A,

Forward Citations: WO9953765, WO9619342, WO9102440, WO8800499, USRE32270, US9670383, US9434500, US9434491, US9284108, US9119451, US9108755, US9073689, US9056697, US8883237, US8871298, US8866054, US8831275, US8828510, US8777095, US8647556, US8642935, US8604399, US8563906, US8440275, US8406481, US8392268, US8332281, US8306284, US8304004, US8304003, US8282539, US8273447, US7998534, US7753669, US7683298, US7561723, US7507473, US7399173, US7384586, US6540862, US6391946, US6306936, US6291075, US6273984, US6218013, US6217695, US6193831, US6136354, US6103802, US6068897, US6037022, US5985772, US5981011, US5968647, US5958484, US5942295, US5900263, US5888565, US5882565, US5853121, US5776842, US5694746, US5603996, US5573693, US5540885, US5310980, US5248478, US5234159, US5151074, US5107089, US5095186, US5049714, US5002833, US4991497, US4990384, US4806398, US4775560, US4757940, US4757174, US4753832, US4705929, US4698246, US4595611, US4592914, US4582247, US4529464, US4456164, US4455184, US4432820, US4391833, US4371110, US4337116, US4328254, US4308985, US4304335, US4302269, US4260098, US4253602, US4208007, US4147836, US4073949, US2013323446, US2013052459, US2011233202, US2011174870, US2011147377, US2011139663, US2011089168, US2011011854, US2010213192, US2010213191, US2010193578, US2010158417, US2010150479, US2009324143, US2009242550, US2009155458, US2009053371, US2009011263, US2008310688, US2008199552, US2008197128, US2008145654, US2008145653, US2008081164, US2008081123, US2008081095, US2007290027, US2007221669, US2007047853, US2007047852, US2007042146, US2005246965, US2005212173, US2005075023, JP62290534, JP60036225, JP4574855, JP2002528660, GB2231527, GB2195313, GB2194771, GB2120199, FR2777428, FR2464203, FR2456040, FR2318082, EP2184308, EP1631613, EP1071336, EP0752208, EP0622310, EP0278055, EP0055584, DE4119218, DE3026023,

Abstract:
Source: US3904104A A **container** is provided formed from a blank made of a laminate which includes nonbrowning paperboard and at least an inner layer of substantially amorphous polyethylene terephthalate bonded to the paperboard by its own substance. A method of making this laminate is provided including the steps of heating an uncoated surface or both surfaces of the paperboard to a temperature of at least about 285 degrees F. and extruding the polyethylene terephthalate layer onto this surface or these surfaces. A method of cooking is provided including the steps of forming a **container** from the blank, placing - food in the **container** and cooking the food at a temperature of up to about 400 degrees F. 2 Claims, 6 Drawing Figures

PatBase - US3904104_A



434) Family number: 4016235 (US3884017A)

© PatBase

Title: Machine for closuring **containers**

Priority: GB19720041669 19720907 IE19730001548 19730831

Family:

Publication number	Publication date	Application number	Application date
BE804605 A	19740307	BE19730135443	19730907
DE2344929 A1	19740314	DE19732344929	19730906
FR2198861 A1	19740405	FR19730032270	19730907
GB1440922 A	19760630	GB19720041669	19720907
IT998541 A	19760220	IT19730028633	19730906
JP49133182 A2	19741220	JP19730099809	19730906
LU68361 A	19750521	LU19730068361	19730905
NL7312401 A	19740311	NL19730012401	19730907
US3884017 A	19750520	US19730394619	19730906

Probable Assignee: METAL BOX CO LTD

Assignee(s):(std)**:** METAL BOX CO LTD

Assignee(s): METAL BOX CY LTD 37 BAKER STREET LONDON W1A 1AN GR BR ; METAL BOX CY LTD GB ; METAL BOX LIMITED ; METAL BOX LTD ; THE METAL BOX CO LTD ; THE METAL BOX CY LTD ; THE METAL BOX CY LTD 37 BAKER STREET LONDON W1A 1AN GR BR

Inventor(s):(std)**:** BUTCHER PETER EDWIN ; BUTCHER PETER E

Inventor(s): EDWIN BUTCHER PETER

International class (IPC 8-9): B65B51/00 B65B51/10 B65B7/16 B65B7/28 (Advanced/Invention); B65B51/00 B65B51/10 B65B7/16 B65B7/28 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1-7): B65B7/16 B65B7/28 B65D85/72 B67B3/04 B67B5/00

CPC: B65B7/162 B65B7/164

European class: 64B23A7 B65B7/16B B65B7/16B1

US class: 53/296 53/329 532/960

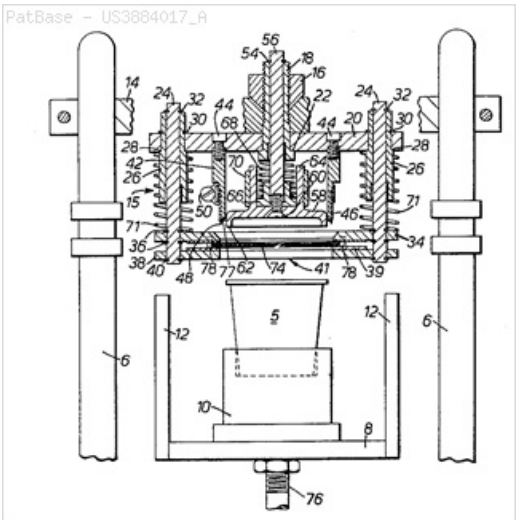
Classification Explorer

Cited documents: US3590554 A, US3507093 A, US2825194 A, US1652595 A,

Forward Citations: US9003746, US8875476, US8407972, US7563339, US7234500, US6385943, US6308494, US6115996, US5946883, US5295343, US5157895, US4866907, US4516380, US4139979, US4035987, US2013318919, US2011167762, US2010287892, US2008223004, JP63062303, JP62125709, ES2582217, EP1241097, EP0136423, EP0136423, EP0032820, DE3210566, DE2852727, CN106043831, CN105383722, CN104097806, CN104097806,

Abstract:

Source: US3884017A A **container** closuring machine comprises means for guiding a longitudinally movable web of foil or un-backed plastics film. A **container** to be **closured** is mounted under the web, and above the web is mounted a **sealing** and cutting head. The latter comprises a tubular shaped knife blade within which is mounted a generally cylindrically shaped heated **sealing** tool. The head and the **container** are arranged to undergo relative movement towards each other so as to clamp the web and to cause the heated **sealing** tool to press the clamped web against the top of the **container**. The **sealing** tool is capable of limited reciprocable movement along the axis of the tubular knife blade, and this movement, in response to the pressure between the tool and the **container**, brings the knife blade into severing contact with the web during the **sealing** process.



435) Family number: 30165159 (US3903672A)

Title: METHOD AND MACHINE FOR FILLED **BAG** PRODUCTION

Priority: IT19720032002 19721123

Family:

Publication number	Publication date	Application number	Application date
BE807613 A	19740315	BE19730138004	19731121
CA992449 A1	19760706	CA19730186500	19731122
CH578972 A	19760831	CH19730015993	19731114
DD109842 C	19741120	DD19730174819	19731122
DE2358013 A1	19740606	DE19732358013	19731121
ES420785 A1	19760316	ES19730420785	19731123
FR2215038 A5	19740819	FR19730041852	19731123
GB1448460 A	19760908	GB19730054564	19731123
IT971143 A	19740430	IT19720032002	19721123
JP50005179 A2	19750120	JP19730131610	19731121
NL7315980 A	19740527	NL19730015980	19731122
SE7315811 L	19740524	SE19730015811	19731122
US3903672 A	19750909	US19730416273	19731115

Probable Assignee: ROSSI VITTORIO

Assignee(s):(std)**:** GOGLIO LUGITI ; GOGLIO LUIGI ; ROSSI ; ROSSI V ; ROSSI VITTORIO ; ROSSI VITTORIO VIA WASHINGTON 11 MILAN ITALIE

Assignee(s): ROSSI VITTORIO IT ; ROSSI VITTORIO MAILAND ITALIEN

Inventor(s):(std)**:** GOGLIO LUGITI ; GOGLIO LUIGI

Inventor(s): GOGLIO LUIGI MAILAND ITALIEN

International class (IPC 8-9): B31B23/00 B31B29/60 B31B37/00 B65B1/02 B65B43/04 B65B9/13 (Advanced/Invention); B31B23/00 B31B29/00 B31B37/00 B65B1/00 B65B43/00 B65B9/10 (Core/Invention)

International class (IPC 1-7): B29C24/00 B29C27/02 B31B21/00 B31B23/00 B65B1/00 B65B1/02 B65B3/02 B65B43/00 B65B43/04 B65B51/14

CPC: B65B1/02 B65B43/04 B31B70/00 B31B2155/00 B31B2155/0012 B31B2160/106

European class: B31B37/00 B31B37/00H2

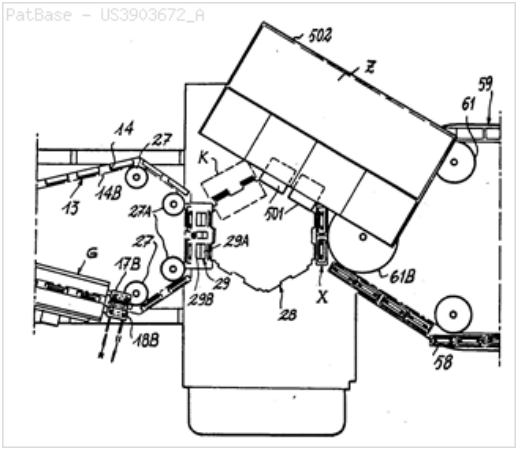
US class: 53/24 53/284.7 53/371.2 53/371.9 53/374.9 53/375.9 53/437 53/456 53/525 53/558

Classification Explorer

Cited documents: US3545166 A, US3453799 A, US3182432 A, US2732989 A, US2481611 A, JP40026638 A2, JP32002789 Y1,

Forward Citations: US5331790, US4909356, US4908009, US4870804, US4840010, US4514959, GB2121754, DE3209971,

Abstract:
Source: US3903672A A machine for producing **bags** from heat **sealable** web material, wherein the continuously advancing material web is tubularly wrapped by edge overlapping on a fixed and preferably horizontal mandrel, and **sealed** at the overlapping zone by grazing along a heated bar and then cut to lengths by a rotary knife, which lengths fall down onto an intermittent conveyor carrying such lengths to a bottom **sealing** device which is effective during the conveyor dwell. 2,481,611 9/1949 Moore 53/124 A 12 Claims, 19 Drawing Figures



436) Family number: 1252153 (US3944193A)

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Title: Method and apparatus for forming by vibration a refractory lining of a **container** for a molten metal

Priority: JP19720085555 19720826 JP19720088056 19720902 US19740476451 19740605
US19730389633 19730821 JP19720126550 19721216

Family:

Publication number	Publication date	Application number	Application date
AU197359676 A1	19750227	AU19730059676	19730827
AU469425 B2	19760212	AU19730059676	19730827
BR7306560 A0	19740627	BR19730006560	19730824
DE2343174 A1	19740321	DE19732343174	19730827
DE2343174 B2	19750807	DE19732343174	19730827
DE2343174 C3	19760819	DE19732343174	19730827
ES418444 A1	19760316	ES19730418444	19730825
GB1395468 A	19750529	GB19730039993	19730823
IT990314 A	19750620	IT19730052154	19730824
JP49040229 A2	19740415	JP19720085555	19720826
JP49043837 A2	19740425	JP19720088056	19720902
JP49082535 A2	19740808	JP19720126550	19721216
JP51035375 B4	19761001	JP19720088056	19720902
JP51035451 B4	19761002	JP19720126550	19721216
JP51048132 B4	19761218	JP19720085555	19720826
JP860915 C3	19770523	JP19720088056	19720902
JP860916 C3	19770523	JP19720126550	19721216
JP871970 C3	19770720	JP19720085555	19720826
US3944193 A	19760316	US19740476451	19740605

Probable Assignee: NIPPON STEEL CORP

Assignee(s):(std)**:** HIROYUKI IMAI ; NIPPON STEEL CORP ; RIDUO KAHARU

Assignee(s): NIPPON STEEL CORP TOKIO ; ASAHI KOGAKU KOGYO KK ; HI ROYREKI IMAI ; HI ROYREKI IMAI E RIDUO KAHARU

Inventor(s):(std)**:** HIMEJI HYOGO JAPAN ; HIROYUKI IMAI ; IMAI HIROYUKI ; KAHARU RIKUO ; RIDUO KAHARU

Inventor(s): RIKUO KAHARU ; HIROYUKIIMAI AND RDCUO KADARU ; HI ROYREKI IMAI ; HI ROYREKI IMAI E RIDUO KAHARU

International class (IPC 8-9): B22C15/32 B22D11/10 B22D35/00 B22D41/02 B28B1/08 B28B1/093 C21B7/14 F27D1/16 (Advanced/Invention);
B22D41/02 (Advanced/Non-invention);
B22C15/00 B22D11/10 B22D35/00 B22D41/02 B28B1/08 C21B7/14 F27D1/16 (Core/Invention);
B22D41/02 (Core/Non-invention)

International class (IPC 1-7): B22C15/10 B22C15/30 B22C15/32 B22C9/12 B22D11/10 B22D35/00 B22D41/02 B28B1/08 B29C5/00 C04B C21B7/14 C21C5/44 C23C C23D5/02 F27D1/10 F27D1/16

CPC: B22D41/023

European class: B22D41/02A

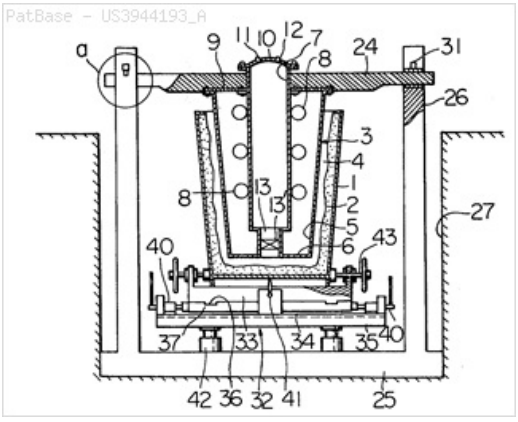
US class: 164/33 164/39 266/1R 266/281

Classification Explorer

Cited documents: US3625278 A, US3492395 A, US3439734 A, US3151200 A, US2942319 A, US2605533 A, US2559356 A, US1944989 A, JP49043837 U1,

Forward Citations: US6932143, US6554054, US5686029, US5360200, US5330690, US4923180, US4890375, US4726570, US4632168, US4612968, US4589633, US4469309, US2014165573, JP7232265, JP52039856, JP3197697, GB2499186, GB2499186, FR2533492, EP0581516, EP0105795, EP0086923, DE3724996, DE2915598, DE2631242, DE2631242,

Abstract:
Source: US3944193A Apparatus for forming a refractory lining is disclosed which comprises a molding **box** for forming a refractory lining of an inner wall of a **container** for molten metal made up of an irregularly shaped mass of refractory material which has been vibrated and given thixotropic fluidity. The molding **box** is positioned within the **container** having at least one hole pierced in its bottom and means are provided for **opening** and closing the hole and vibrating the molding **box**, with the hole being connected with a vessel for vibrating the refractory material.



437) Family number: 3089668 (US3926364A)

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Title: BRACING **PACKAGE**

Priority: EP19880311593 19881207 FI19720003255 19721120 SE19740015301 19741206
SE19730015301 19731114 SE19740015301 19731114 GB19870028639 19871208
WO1988GB01071 19881207

Family:

Publication number	Publication date	Application number	Application date
AT341940 B	19780310	AT19730009602	19731114
AT61484 E	19910315	AT19880311593T	19881207
AT960273 A	19770615	AT19730009602	19731114
AU197362661 A1	19750522	AU19730062661	19731119
AU198928225 A1	19890705	AU19890028225	19881207
AU607570 B2	19910307	AU19890028225	19881207
BRPI8807837 A	19901113	BR1988PI07837	19881207
CA1001124 A1	19761207	CA19730186094	19731119
CH561137 A	19750430	CH19730015834	19731112
CS275761 B6	19920318	CS19880008072	19881207
CS8808072 A2	19910514	CS19880008072	19881207
DE2357341 A1	19740522	DE19732357341	19731116
DE3861955 D1	19910411	DE19883861955	19881207
DE7341072 U	19740328		00000000
DK140690 A	19900608	DK19900001406	19900608
DK140690 A0	19900608	DK19900001406	19900608
DK140690 B	19791029	DK19730006229	19731119
DK140690 C	19800414	DK19730006229	19731119
DK165957 B	19930215	DK19900001406	19900608
DK165957 C	19930705	DK19900001406	19900608
EP0320240 A1	19890614	EP19880311593	19881207
EP0320240 B1	19910306	EP19880311593	19881207
ES197670 U	19750501	ES19730197670U	19731120
ES197670 Y	19751016	ES19730197670U	19731120
ES2021437 B3	19911101	ES19880311593T	19881207
FI48566 B	19740731	FI19720003255	19721120
FI48566 C	19741111	FI19720003255	19721120
FI895701 A0	19891128	FI19890005701	19891128
FR2208386 A5	19740621	FR19730040963	19731116
GB1436353 A	19760519	GB19730053374	19731116
GB8728639 A0	19880113	GB19870028639	19871208
GR3001608 T3	19921123	GR19910400329T	19910314
HU206918 B	19930128	HU19880000349	19881207
HU206918 B	19930128	HU19890000349	19881207
HU54238 A2	19910128	HU19880000349	19881207
HU8900349 A0	19900928	HU19880000349	19881207
HU8900349 A0	19900928	HU19890000349	19881207
IE883650 L	19890608	IE19880003650	19881207
IT1001817 A	19760430	IT19730031454	19731116
JP3501521 T2	19910404	JP19890500395T	19881207
JP3501521 T2	19910404	JP19880500395T	19881207
JP50070177 A2	19750611	JP19730129667	19731117
JP53023747 B4	19780717	JP19730129667	19731117
JP944624 C3	19790320	JP19730129667	19731117
NL172137 B	19830216	NL19730015843	19731119
NL172137 C	19830718	NL19730015843	19731119
NL7315843 A	19740522	NL19730015843	19731119
NZ227219 A	19900426	NZ19880227219	19881206
SE387605 B	19760913	SE19740015301	19731114
SE387605 C	19761223	SE19740015301	19731114
SE399230 B	19780206	SE19730015415	19731114
SE399230 C	19780518	SE19730015415	19731114
SE7415301 A	19750515	SE19740015301	19731114
SU1036242 D	19830815	SU19762322018	19760205
SU606544 D	19780505	SU19731972002	19731119
SU606544 T	19780505	SU19731972002	19731119
US3926364 A	19751216	US19730416371	19731116
US5116576 A	19920526	US19900548971	19900802
WO8905457 A1	19890615	WO1988GB01071	19881207

Probable Assignee: HELVETEAUX LTD

Assignee(s):(std)**:** HELVETEAUX LTD ; JANHOHEN VEIKKO ; JANHONEN ; JANHONEN V ; JANHONEN V SF ; SCIENT GENERICS LTD ; JANHONEN VEIKKO ILMARI ; KORSGAARD EBBE ; VEJKKO YANKHONEN SF ; VEIKKO JANHONEN TE HELSINKI ; VEJKKO YANKHONEN

Assignee(s): EBBE KORSGAARD ; JANHONEN VEIKKO I ; PUSSIKESKUS OY A FINNISH CORP ; SEALED AIR CORP ; JANHONEN VEIKKO SF ; VEIKKO ILMARI JANHONEN ; VEIKKO JANHONEN ; SCIENTIFIC GENERICS LTD GB ; SCIENTIFIC GENERICS LTD ; SCIENTIFIC GENERICS LIMITED ; SCIENTIFIC GENERICS LTD CAMBRIDGE GB ; JANHONEN VEIKKO ILMARI HELSINKI ; JANHONEN VEIKKO

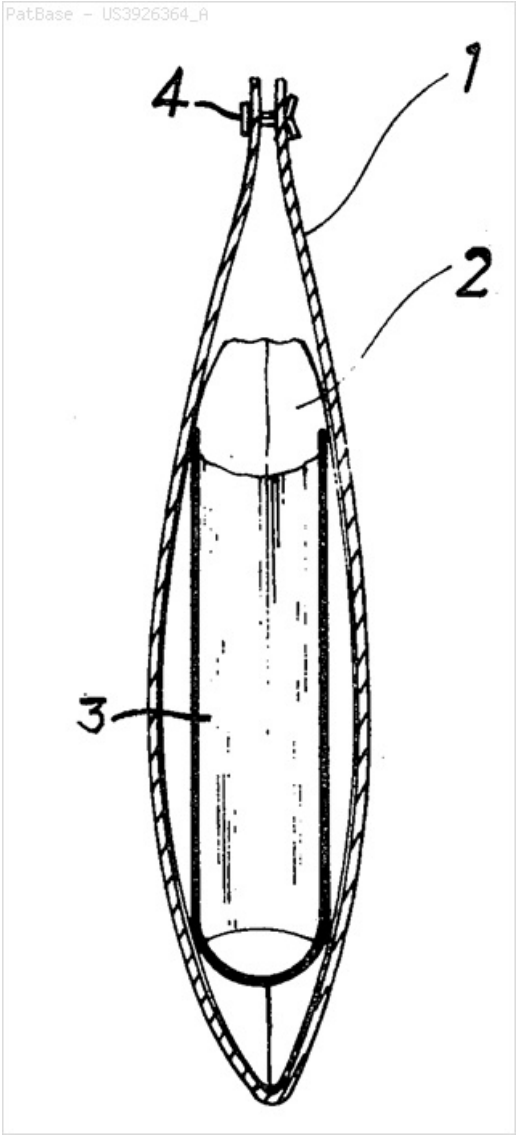
Inventor(s):(std)**:** JANHONEN V SF ; JANHONEN VEIKKO ; SOK ; STANLEY CHRISTOPHER J ; STANLEY CHRISTOPHER JOHN ; STANLEY JOHN CHRISTOPHER ; VEIKKO JANHONEN ; VEJKKO YANKHONEN FI ; VEJKKO YANKHONEN SF ; YANKHONEN VEJKKO ; VEJKKO YANKHONEN ; JANHONEN VEIKKO ILMARI ; JANHONEN VEIKKO I ; JANHONEN ; JANHOHEN VEIKKO ; STANLEY CHRISTOPHER JOHN DR ; JANHONEN V

Inventor(s): CHRISTOPHER JOHN STANLEY ; JANHONEN VEIKKO ILMARI HELSINKI ; STANLEY CHRISTOPHER JOHN ST IVES... ; STANLEY CHRISTOPHER JOHN ST IVES CAMBRIDGESHIRE PE ; STANLEY CHRISTOPHER

	JOHN GB ; STANLEY CHRISTOPHER JOHN ST IVES CAMBRIDGESHIRE PE17 4JB GB
Agent(s):	FB RICE; FB RICE PTY LTD
Designated states:	AT AU BE BR CH DE DK ES FI FR GB GR HU IT JP LI LU NL SE SU US
International class (IPC 8-9):	B01L3/00 B65D27/00 B65D30/00 B65D30/02 B65D33/00 B65D33/02 B65D33/38 B65D61/00 B65D65/12 B65D75/38 B65D77/04 B65D85/57 C12M1/34 C12Q1/00 G01N33/52 G01N33/53 G01N33/543 G01N35/02 (Advanced/Invention); B65D65/12 B65D77/04 C12M1/34 C12Q1/00 G01N35/02 (Advanced/Non-invention); B01L3/00 B65D27/00 B65D30/02 B65D33/00 B65D33/02 B65D33/36 B65D61/00 B65D75/38 B65D77/04 B65D85/57 C12M1/34 C12Q1/00 G01N33/52 G01N33/53 G01N33/543 G01N35/02 (Core/Invention); B65D65/02 B65D77/04 (Core/Non-invention)
International class (IPC 1-7):	B42F7/00 B65D13/00 B65D15/24 B65D25/26 B65D27/00 B65D27/02 B65D27/28 B65D30/10 B65D31/00 B65D31/04 B65D31/16 B65D33/00 B65D33/02 B65D33/38 B65D37/00 B65D61/00 B65D65/12 B65D75/38 B65D77/04 B65D81/02 B65D81/14 B65D85/00 B65D85/54 C12M1/34 C12Q1/00 C12Q1/24 C12Q1/68 G01N21/00 G01N31/00 G01N31/22 G01N33/00 G01N33/50 G01N33/52 G01N33/53 G01N33/543 G01N33/561 G01N35/00 G01N35/02
CPC:	B65D33/02 B01L3/505 B01L3/502 B01L2300/087 B01L2400/0605 B01L2400/0683 G01N33/525 G01N33/54366 G01N33/54386
European class:	B01L3/502 B01L3/505 B65D33/02 G01N33/52C G01N33/543K G01N33/543K4 L01L300/08E6 L01L400/06C L01L400/06P2
US class:	206/472 229/55 383/109 383/119 383/33 383/92 422/413 422/55 422/58 422/61 422/68.1 422/681 422/944 435/287 435/287.2 435/287.6 435/287.7 435/288.4 435/291 436/518
Classification Explorer	
Cited documents:	US4916078 A, US4898832 A, US4842995 A, US4770853 A, US461143 A, US3933594 A, US3825410 A, US3723064 A, US1740539 A, EP0279574 A1, EP0174247 A2, EP0052769 A1, DE1598224 A1, AU5418886 A1, AU533869 B2, AU1145888 A1,
Forward Citations:	WO8404083, WO8302764, WO07054850, WO07054850, WO0141930, WO0136974, WO0050891, WO0032744, USD468437, US9839909, US9757725, US9744506, US9707556, US9506105, US9334528, US9327284, US9198609, US9101311, US9062342, US8940231, US8865458, US8859204, US8828654, US8822183, US8784745, US8765367, US8735055, US8685714, US8563275, US8551698, US8491178, US8480976, US8394626, US8278071, US8257925, US8067159, US8052929, US8048375, US7972778, US7955558, US7947492, US7858034, US7857957, US7811811, US7780336, US7767447, US7560272, US7517495, US7300633, US7270959, US7241419, US7060225, US7045342, US6881378, US6812038, US6767714, US6649378, US6645758, US6485982, US6341473, US6319676, US6319472, US6309602, US6225059, US6170227, US6153425, US5955351, US5939331, US5840573, US5674653, US5593804, US5476016, US5451500, US5356782, US5229297, US4627223, US4325507, US2014234891, US2011143339, US2010326999, US2010047920, US2010028204, US2008260581, US2008047832, US2007148052, US2007105213, US2007042489, US2005027187, US2004203137, US2004185551, US2004077074, GB2430032, GB2430032, FR2435402, DE29618517, DE19510090, DE19510090,

Abstract:
Source: US3926364A The **package** is made up of an outer folded over bracing plate and an inner **bag**-like or tubular part which is secured on opposite sides to the bracing plate. The bracing plate is biased into an **opened** condition and thus causes the back-like part to also **open** in order to receive goods. The outer ends of the bracing plate can be secured together as by staples in order to form an enclosed **package**. 7 Claims, 2 Drawing Figures

PatBase - US3926364_A



438) Family number: 1510446 (US3828973A)

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Title: METHOD OF AND MEANS FOR **DISPENSING**

Priority: CA19730183385 19731015 CA19760265322 19761110 US19730407260 19731017 US19740462420 19740419 US19720300505 19721025

Family:

Publication number	Publication date	Application number	Application date
AR199593 A1	19740913	AR19730250707	19731025
AR201747 A1	19750415	AR19730250708	19731025
AR205917 A1	19760615	AR19750257401	19750101
AT325980 B	19751125	AT19730008985	19731023
AT332754 B	19761011	AT19730008986	19731023
AT898573 A	19750115	AT19730008985	19731023
AT898673 A	19760115	AT19730008986	19731023
AU197361550 A1	19750424	AU19730061550	19731018
AU197361609 A1	19750424	AU19730061609	19731019
BE806498 A	19740425	BE19730137048	19731025
BE806499 A	19740425	BE19730137049	19731025
BR7308368 A0	19740905	BR19730008368	19731025
BR7308369 A0	19740905	BR19730008369	19731025
CA1004643 A1	19770201	CA19730183385	19731015
CA1009985 A1	19770510	CA19730183354	19731015
CA1023305 A1	19771227	CA19760265322	19761110
CA1023305 A2	19771227	CA19760265322	19761110
CH572420 A	19760213	CH19730014979	19731024
CH578458 A	19760813	CH19730014978	19731024
DE2353520 A1	19740502	DE19732353520	19731025
DE2353570 A1	19740509	DE19732353570	19731025
ES419911 A1	19760401	ES19730419911	19731024
ES419914 A1	19760401	ES19730419914	19731024
FR2204546 A1	19740524	FR19730037888	19731024
FR2204546 B3	19760917	FR19730037888	19731024
FR2205046 A5	19740524	FR19730037887	19731024
GB1453313 A	19761020	GB19730048859	19731019
GB1453314 A	19761020	GB19750008522	19731019
IT1006622 A	19761020	IT19730030521	19731024
IT1019554 A	19771130	IT19730030522	19731024
JP49134475 A2	19741224	JP19730120348	19731025
JP49134477 A2	19741224	JP19730120349	19731025
JP55046945 B4	19801127	JP19730120348	19731025
NL7314690 A	19740429	NL19730014690	19731025
NL7314691 A	19740429	NL19730014691	19731025
NO141551 B	19791227	NO19730004089	19731022
NO141551 C	19800409	NO19730004089	19731022
SE401351 B	19780502	SE19730014417	19731024
SE401351 C	19780810	SE19730014417	19731024
SE7705261 A	19770505	SE19770005261D	19770505
SE7705262 A	19770505	SE19770005262D	19770505
US3828973 A	19740813	US19720300505	19721025
US3893599 A	19750708	US19730407260	19731017
US3960298 A	19760601	US19740462420	19740419
ZA7308243 A	19740925	ZA19730008243	19731024
ZA7308258 A	19741030	ZA19730008258	19731025

Probable Assignee: CORNELIUS CO

Assignee(s):(std)**:** CORNELIUS COMAPNY ; CORNELIUS ; CORNELIUS CO

Assignee(s): CORNELIUS CO THE ; CORNELIUS CO US ; BIRRELL PETER L ; CORNELIUS COMPANY THE ; CORNELIUS CY ; CORNELIUS CY 400 SHELARD PLAZA SOUTH SUITE 680 ST LOUIS PARK MINNESOTA EUA ; THE CORNELIUS CO ; THE CORNELIUS COMPANY ; CORNELIUS CY US ; THE CORNELIUS COMAPNY ; THE CORNELIUS ; THE CORNELIUS CY ; THE CORNELIUS CY 400 SHELARD PLAZA SOUTH SUITE 680 ST LOUIS PARK MINNESOTA E U A ; THE CORNELIUS CY 400 SHELARD PLAZA SOUTH SUITE 680 ST LOUISPARK MINNESOTA E U A ; CORNELIUS CY 400 SHELARD PLAZA SOUTH SUITE 680 STLOUISPARK MINNESOTA EUA

Inventor(s):(std)**:** BIRRELL P L ; BIRRELL PETER L ; BIRRELL PETER LESLIE ; BIRELL P L ; BIRRELL P ; BIRELL PETER LESLIE

Inventor(s): BIRRELL P CA ; LESLIE BIRRELL PETER ; P L BIRELL ; P L BIRRELL ; PETER LESLIE BIRRELL ; PL BIRRELL

International class (IPC 8-9): B65D47/00 B65D47/20 B65D47/28 B65D47/36 B65D47/38 B65D49/00 B65D83/06 B67B7/12 B67D3/00 (Advanced/Invention);
B65D47/00 B65D47/04 B65D49/00 B65D83/06 B67B7/00 B67D3/00 (Core/Invention)

International class (IPC 1-7): A01C23/04 A47F1/03 A47F1/035 B65D17/00 B65D17/16 B65D17/24 B65D25/38 B65D41/00 B65D41/32 B65D45/02 B65D47/00 B65D47/02 B65D47/04 B65D47/06 B65D47/10 B65D47/20 B65D47/26 B65D47/28 B65D47/36 B65D49/00 B65D49/08 B65D49/12 B65D51/20 B65D51/22 B65D55/02 B65D83/06 B67B7/12 B67D3/00 B67D3/02 B67D5/02

CPC: B65D47/00 B65D47/38 B65D83/06 B67D3/0032

European class: B65D47/00 B65D47/38 B65D83/06 B67D3/00H2

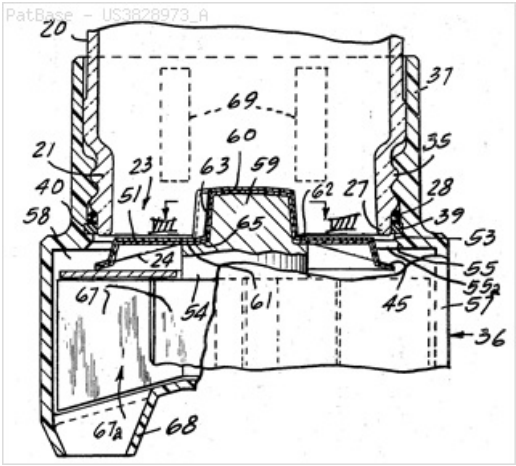
US class: 222/1 222/325 222/518 222/541 222/541.6 222/545 222/82 222/88

Classification Explorer

Cited documents: US3828973 A, US3768697 A, US3443726 A, US3307746 A, US3193146 A, US3157320 A, US2961132 A, US2822959 A, US2755003 A, US2661128 A, US2526349 A, US2518349 A, US2289452 A, US2198564 A, US1982917 A, US1840194 A, US1244205 A, US1056914 A,

Forward Citations: WO0222449, WO0222449, USRE42743, USD713931, USD688079, USD677509, USD643239, USD642849, USD623885, USD617132, USD608129, USD582194, US9594723, US9396161, US9330058, US9164952, US9090449, US9090448, US9090447, US9090446, US9037834, US9015352, US9002998, US8880849, US8767804, US8706916, US8606395, US8589660, US8565917, US8548624, US8543795, US8543794, US8533431, US8442096, US8380884, US8356731, US8356161, US8290616, US8290615, US8281821, US8276135, US8250339, US8249135, US8225073, US8200799, US8190290, US8108656, US8103378, US7937591, US7918368, US7904603, US7865847, US7822109, US7809050, US7752419, US7708172, US7689476, US7668229, US7660984, US7653710, US7620097, US7611031, US7609297, US7606943, US7602740, US7512173, US7493375, US7489779, US7484388, US7478031, US7458665, US7434603, US7419073, US7416097, US7389895, US7367480, US7356381, US7337924, US7278552, US7204259, US7203572, US7168592, US7083071, US7032780, US7032779, US7004355, US6986263, US6915925, US6896159, US6857541, US6848600, US6799085, US6766656, US6751525, US6685056, US6386392, US6321941, US6152327, US6123232, US6095370, US6029860, US5937921, US5405053, US5295519, US5295518, US5289855, US5289854, US5284188, US5281391, US5271892, US4834266, US3960298, US2009277535, US2008054017, US2008053564, US2007267100, US2007029350, US2006219739, US2006196887, US2005177481, US2005177454, US2005173464, US2005167446, US2005133532, US2005133531, US2005121467, US2005011916, US2004261443, US2004250564, US2004217124, US2004215521, US2004211210, RU2493066, GB2195984, GB2195984, FR2769004, FR2631536, EP1702860, EP0641713, EP0438451, EP0434168, EP0343090, EP0264257, EP0264257, EP0175314, EP0098042,

Abstract:
Source: US3828973A Method and means for **dispensing** from replaceable **containers** provided with diaphragm-like **closures**, wherein the **closure** is movably controlled to control the flow of contents from the **container**. Several forms of **dispensers** are provided, adapted for **containers** for flowable particulate material, liquids, or gas. Several forms of **closures** especially adapted therefor are also disclosed.



439) Family number: 1067848 (US3807597A)

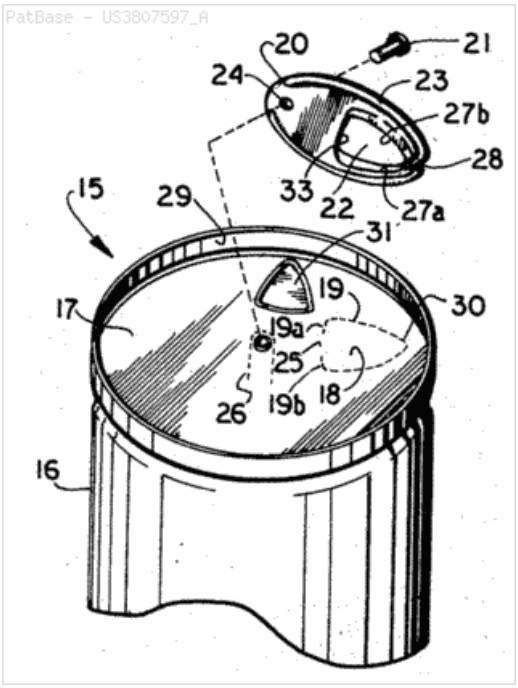
Title:	SELF-**OPENING** **CONTAINER** TOP
Priority:	US19720216709 19720110 US19740451506 19740315

Family:

Publication number	Publication date	Application number	Application date
US3807597 A	19740430	US19720216709	19720110
US3880319 A	19750429	US19740451506	19740315

Probable Assignee:	SMW ATLANTA INC
Assignee(s):(std):	SMW ATLANTA INC
Assignee(s):	SMW ATLANTA INC US ; STROBE CARL J ; WELLS ROBERT A ; WELLS VERA T ; WELLS VERA T DENVER CO
Inventor(s):(std):	STROBE CARL J ; WELLS ROBERT A ; WELLS R ; STROBE C
Inventor(s):	WELLS R US ; STROBE C US
International class (IPC 8-9):	B65D17/00 B65D17/34 (Advanced/Invention); B65D17/00 B65D17/28 (Core/Invention)
International class (IPC 1-7):	B65D17/00 B65D17/06 B65D17/24 B65D17/34
CPC:	B65D17/4014
European class:	B65D17/16B2B
US class:	220/277 220/278 220/4.8 220/48 222/81 D9/435 D9/439
Classification Explorer	
Cited documents:	US3726432 A, US3708091 A, US3628695 A, US3618815 A, US3473692 A, US3383007 A, US2899100 A, US2294102 A,
Forward Citations:	USD671834, US9901972, US9850026, US8720717, US8528783, US8215513, US5353942, US5248053, US4991732, US4982862, US4957216, US4932555, US4928844, US4911323, US4865215, US4821912, US4648528, US4580692, US3994413, US3981411, US3970211, US3949898, US3934750, US3924777, US3912115, US3877604, US2010243671, GB2518740, GB2255081, EP0078397, EP0078397,

Abstract:
Source: US3807597A **Container** top which is useful as a **closure** for beverage **containers** and the like and which is **openable** without requiring a can **opener** or other additional implements, which does not require removal of a tear **tab** or a similar disposable article, which does not deposit a detached **closure** member within the **container**, and which is noninjurous to the user. The **container** top is provided with a scored section which can be deformed from the **container** top to lie inwardly of the **container**. An **opening** member attached to the **container** top includes a **tab** displacing portion for separating the **tab** along the scored line, and also includes a deforming portion for deforming the **tab** from the top. The **opening** member is movable from a non-use position into alignment with the scored **tab**, and may contain an aperture coincident with the **opening** presented by deformation of the **tab**, through which the contents of the **container** are accessible. In another disclosed embodiment of the present apparatus, the **opening** member provides a removable **closure** for an **opened** **container**. 21 Claims, 12 Drawing Figures



440) Family number: 30942251 (US3923183A)

Title: **CONTAINER** FOR MEDICAL LIQUID WITH SEPARABLE OUTER AND INNER **CLOSURES**

Priority: US19730338662 19730307 US19750613635 19750915

Family:

Publication number	Publication date	Application number	Application date
AU197464659 A1	19750724	AU19740064659	19740118
AU476393 B2	19760916	AU19740064659	19740118
BE810027 A	19740516	BE19740140062	19740122
BR7401594 A0	19741231	BR19740001594	19740305
CA1008805 A1	19770419	CA19740190264	19740116
CH565087 A	19750815	CH19740001865	19740211
DE2402080 A1	19740926	DE19742402080	19740117
ES221986 U	19761101	ES19740221986U	19740223
ES221986 Y	19770301	ES19740221986U	19740223
FR2220242 A1	19741004	FR19740002997	19740130
FR2220242 B1	19780317	FR19740002997	19740130
GB1437686 A	19760603	GB19740003338	19740124
IN140311 A	19761016	IN1974CA00123	19740117
IT1008311 A	19761110	IT19740048687	19740225
JP49119787 A2	19741115	JP19740026130	19740306
JP52036474 B4	19770916	JP19740026130	19740306
JP906921 C3	19780508	JP19740026130	19740306
PH10632 A	19770721	PH19740015452	19740129
US3923183 A	19751202	US19730338662	19730307
US4015400 A	19770405	US19750613635	19750915
ZA7400328 A	19741127	ZA19740000328	19740116

Probable Assignee: MCGAW INC MORAINE MONTGOMERY COUNTY A CORP OF OH

Assignee(s):(std)**:** AMERICAN HOSPITAL SUPPLY CORP

Assignee(s): AMERICAN HOSPITAL SUPPLY CORP EVANSTON ILL V ST A ; AMERICAN HOSPITAL SUPPLY CORP US ; CHOKSI PRADIP V ; GENERAL ELECTRIC CAPITAL A NEW YORK CORP CORP ; GENERAL ELECTRIC CAPITAL CORP ; KENDALL MCGAW LABORATORIES INC ; WELLS FARGO BANK NA ; MCGAW INC ; KENDALL MCGAW LABORATORIES INC A CORP OF OH ; KENDALL MCGAW LABORATORIES INC AN OH CORP ; MCGAW INC A CORP OF DELAWARE ; MCGAW INC MORAINE MONTGOMERY COUNTY A CORP OF OH ; STEIDLEY ROY B

Inventor(s):(std)**:** CHOKSH P ; CHOKSI P ; CHOKSI PRADIP V ; PRADIP V CHOKSI ; ROY B STEIDLEY ; STEIDLEY R ; STEIDLEY ROY B

Inventor(s): STEIDLEY ROY B ROCKVILLE CONN ; CHOKSI PRADIP V NORTH HOLLYWOOD CALIF

International class (IPC 8-9): A61J1/00 A61J1/05 A61J1/14 B65D1/02 B65D41/62 B65D51/18 (Advanced/Invention); A61J1/00 A61J1/05 A61J1/14 B65D1/02 B65D41/00 B65D51/18 (Core/Invention)

International class (IPC 1-7): A61J1/00 A61K B65B43/40 B65B7/28 B65D1/02 B65D39/08 B65D41/32 B65D41/34 B65D41/62 B65D51/18 B65D51/20 B65D51/22 B65D55/02 B65D55/12 B65D81/18 B65G11/20 B67B3/00

CPC: Y10S215/03 Y10S215/901 A61J1/1462 A61J1/18 A61J1/1468 A61J1/05 B65D51/18 B65D2203/04 B65D2251/0015 B65D2251/0078 B65D2501/0081 A61J1/1418 A61J1/1431

European class: A61J1/00C A61J1/00T A61J1/05 A61J1/14C A61J1/14H A61J1/18 B65D51/18 K61J1/14C2 K61J1/14C6 K61J1/14M L65D203/04 L65D251/00Y2D L65D251/00Y6D L65D501/02Y9

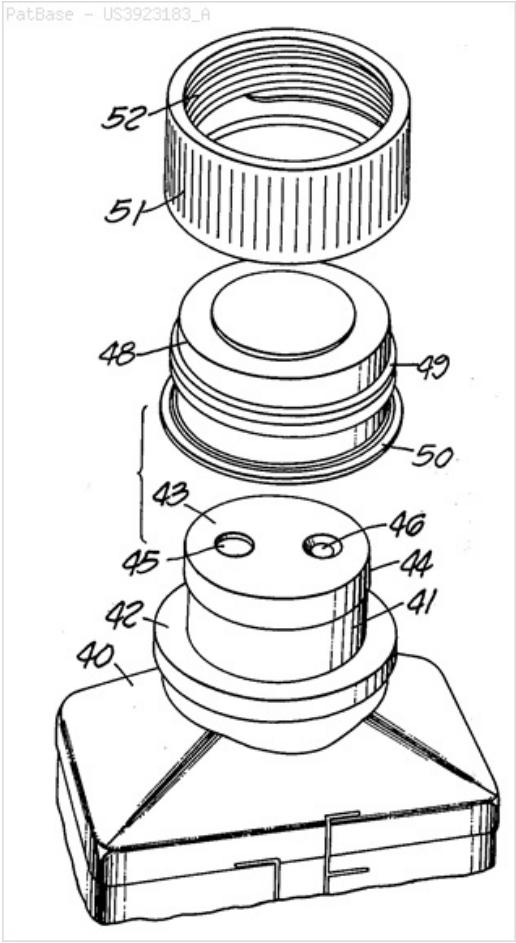
US class: 215/251 215/384 215/399 215/45 215/46 215/48 215/901 215/DIG.3 53/3 53/381.4 53/492 604/403

Classification Explorer

Cited documents: US3820675 A, US3730372 A, US3664536 A, US3640417 A, US3597793 A, US3591031 A, US3517847 A, US3443711 A, US3419172 A, US3394831 A,

Forward Citations: WO05018526, USD728783, USD536984, USD535883, USD534804, USD426161, US9758281, US9586730, US8865458, US8845602, US8650839, US8394626, US8251236, US8100277, US7798359, US7780024, US7766178, US7644902, US7560272, US6655553, US6279600, US6176255, US6102064, US5762215, US5755269, US5586673, US5586590, US5573046, US4901873, US4757911, US4512486, US4236646, US4093093, US4091949, US2015353241, US2014263314, US2010028981, US2008141454, US2008112847, US2005145086, US2005070853, US2004133128, US2004132091, JP62036294, GB2202521, FR2383849, FR2383847, FR2383847, FR2383845, FR2383088, FR2383088, EP0316636, EP0089978, EP0089978, DE2811092,

Abstract:
Source: US3923183A A thermoplastic bottle for sterile medical liquids with a **dispensing** outlet closed off by an inner **closure**. An outer **closure** in the form of a thermoplastic cap overlies the inner **closure**. During steam sterilization at 240 DEG to 260 DEG F (116 DEG to 127 DEG C) the outer cap deflects inwardly against the inner cap to force the inner cap into a tighter **seal** against the bottle. This outer cap includes external left-handed threads and has a lateral frangible brim fused to the thermoplastic bottle. A threaded jacking ring is screwed onto the outer cap and with a counterclockwise motion acts to (1) fracture the cap's external brim and (2) separate the outer cap from the **sealed** inner cap.


PatBase - US3923183_A
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441) Family number: 1091758 (US3832824A)

Title: APPARATUS AND METHOD FOR EVACUATING **PACKAGES**

Priority: US19730375300 19730629 US19740480907 19740619

Family:

Publication number	Publication date	Application number	Application date
AR200902 A1	19741227	AR19740251944	19740115
AU197465563 A1	19750814	AU19740065563	19740213
AU474917 B2	19760805	AU19740065563	19740213
BE810814 A	19740529	BE19740140731	19740208
BR7401671 A	19751111	BR19740001671	19740307
CA980238 A1	19751223	CA19730187872	19731211
CH570901 A	19751231	CH19740001283	19740130
DE2404038 A1	19750123	DE19742404038	19740129
DE2404038 C2	19870326	DE19742404038	19740129
DE2404038 C3	19870326	DE19742404038	19740129
DK142491 B	19801110	DK19740002197	19740422
DK142491 C	19810720	DK19740002197	19740422
DK219774 A	19750210	DK19740002197	19740422
FR2235056 A1	19750124	FR19740022716	19740628
FR2235056 B1	19800411	FR19740022716	19740628
GB1436471 A	19760519	GB19740001334	19740111
IT1015830 A	19770520	IT19740048952	19740304
JP50021880 A2	19750308	JP19740031080	19740320
JP54014989 B4	19790611	JP19740031080	19740320
JP984110 C3	19800122	JP19740031080	19740320
NL173730 B	19831003	NL19740000964	19740124
NL173730 C	19840301	NL19740000964	19740124
NL7400964 A	19741231	NL19740000964	19740124
SE414481 B	19800804	SE19740003541	19740315
SE414481 C	19801120	SE19740003541	19740315
SE7403541 A	19741230	SE19740003541	19740315
SE7403541 L	19741230	SE19740003541	19740315
US3832824 A	19740903	US19730375300	19730629
US3928938 A	19751230	US19740480907	19740619
ZA7400320 A	19741127	ZA19740000320	19740116

Probable Assignee: WR GRACE AND CO

Assignee(s):(std)**:** GRACE W R AND CO ; GRACE W R LTD ; GRACE AND CO

Assignee(s): GRACE AND CO US ; GRACE CO W R ; GRACE W AND CO ; GRACE W AND CO US ; BURRELL WILLIAM E ; WR GRACE AND CO ; W R GRACE AND CO ; W R GRACE AND CO NEW YORK N Y V ST A ; W R GRACE AND CO NEW YORK N Y US ; W R GRACE AND CO TE NEW YORK ; GRACE WR AND CO

Inventor(s):(std)**:** BURRELL WILLIAM E ; BURRELL WILLIAM EDWARD ; BURRELL W ; BURRELL W E

Inventor(s): BURRELL W US ; BURRELL WILLIAM EDWARD DUNCAN S C ; BURRELL WILLIAM EDWARD DUNCAN S C US ; BURRELL WILLIAM EDWARD DUNCAN S C V ST A ; W E BURRELL ; WILLIAM EDWARD BURRELL

International class (IPC 8-9): B65B31/02 B65B51/00 B65B51/08 (Advanced/Invention); B65B31/02 B65B51/00 (Core/Invention)

International class (IPC 1-7): B65B25/22 B65B31/02 B65B31/04 B65B31/06 B65B51/08 B65D

CPC: B65B31/024

European class: B65B31/02E

US class: 53/22B 53/417 53/434 53/479 53/512 53/86

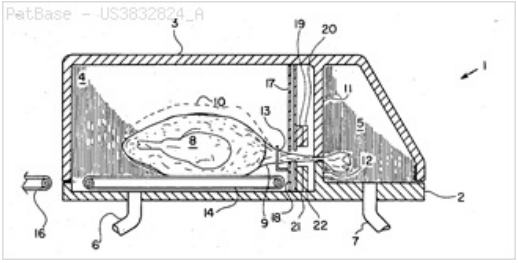
Classification Explorer

Cited documents: US3832824 A, US3714754 A, US2790284 A, JP47046191 A2, DE2161608 A1, DE2149414 A1, DE2122648 A1, DE1939216 A1,

Forward Citations: WO9011936, WO8500338, WO04076284, WO04076284, US9550595, US9073654, US8360628, US8099931, US8069637, US7670042, US7503158, US7484346, US7478516, US7464522, US7454884, US7401452, US7334386, US7328556, US7308785, US7231753, US7207160, US7204067, US7200974, US7197861, US7140167, US7131250, US7086211, US7076929, US7021034, US7021027, US7003928, US6862867, US6586026, US6430901, US6282869, US5784862, US5692360, US5528880, US5514400, US5484001, US5062252, US5056292, US5035103, US4941310, US4926614, US4925687, US4922686, US4672793, US4600927, US4583347, US4578928, US4534984, US4478025, US4335559, US4189897, US4188769, US4132048, US4085231, US3965646, US3928938, US2014123599, US2014069057, US2011138747, US2011088571, US2009260326, US2009255416, US2009004350, US2008095902, US2008053046, US2007155607, US2007033907, US2006213148, US2006123737, US2005183396, US2005172834, US2005150195, US2005076616, US2005050856, US2005050855, US2005039420, US2005028494, US2005028488, US2005022480, US2005022474, US2005022473, US2005022471, US2004144063, US2004139701, US2002152281, JP57500733, JP57153826, JP57153825, JP57017716, JP55064021, JP3070712, GB2233626, GB2135648, FR2302236, EP1564147, EP0077458, DK155082, DE3411917, DE2713896, DE2558733, DE102010055438,

Abstract:
Source: US3832824A A filled flexible receptacle such as a thermoplastic **bag** containing a food product is evacuated by placing the filled portion of the **bag** in a first vacuum chamber; extending the neck of the **bag** into a second and adjacent chamber; evacuating the first chamber thereby causing the **bag** to balloon outwardly away from the product; and, while the first chamber is being evacuated, evacuating the second chamber and, consequently, evacuating the interior of the ballooned **bag**; thereafter, when evacuation of the **bag** is complete, elevating the pressure in the first chamber to collapse the **bag** firmly around the product and immediately closing the **bag** thereby making an evacuated **package**.

PatBase - US3832824_A



442) Family number: 18808826 (US3868052A)

Title: MOIST TISSUE **DISPENSING**

Priority: US19730336057 19730226

Family:

Publication number	Publication date	Application number	Application date
AT108974 A	19751015	AT19740001089	19740212
AT330987 B	19760726	AT19740001089	19740212
AU197464764 A1	19750724	AU19740064764	19740123
BE810869 A	19740529	BE19740140776	19740211
BR7401343 A0	19741105	BR19740001343	19740222
CA998648 A1	19761019	CA19740192308	19740212
CH573741 A	19760331	CH19740001943	19740212
DE2405793 A1	19740905	DE19742405793	19740207
DE2405793 C2	19841025	DE19742405793	19740207
DK144556 B	19820329	DK19740000648	19740206
DK144556 C	19820920	DK19740000648	19740206
ES221981 U	19761101	ES19740221981U	19740121
ES221981 Y	19770301	ES19740221981U	19740121
FR2218866 A1	19740920	FR19740003823	19740205
GB1422753 A	19760128	GB19740005630	19740207
IT1002868 A	19760520	IT19740048206	19740207
JP1234342 C3	19841017	JP19740021562	19740225
JP49117184 A2	19741108	JP19740021562	19740225
JP59002493 B4	19840119	JP19740021562	19740225
NL7402579 A	19740828	NL19740002579	19740226
PH12919 A	19791010	PH19740015548	19740225
SE383093 B	19760301	SE19740002278	19740221
SE383093 C	19760610	SE19740002278	19740221
US3868052 A	19750225	US19730336057	19730226
ZA7400398 A	19750827	ZA19740000398	19740118

Probable Assignee: COLGATE PALMOLIVE CO

Assignee(s):(std)**:** BLKHCOLGATE PALMOLIVE CO ; COLGATE PALMOLIVE CO ; ROCKEFELLER WINSTON G

Assignee(s): COLGATE PALMOLIVE CY US ; COLGATE PALMOLIVE CO NEW YORK N Y US ; COLGATE PALMOLIVE COMPANY ; BLKHCOLGATE PALMOLIVE COMPANY

Inventor(s):(std)**:** ROCKEFELLER W G ; ROCKEFELLER WINSTON G ; ROCKEFELLER WINSTON GARDNER ; ROCKEFERRER WINSTON GARDNER ; ROCKKEFELLER W ; UINSUTON GAADONAA ROTSUKUFUERA ; WINSTON GARDNER ROCKEFERRER ; UINSUTON GAADONAA ROTSUKUFUERAA ; ROCKEFELLER W

Inventor(s): GARDNER ROCKEFELLER WINSTON ; ROCKEFELLER WINSTON GARDNER WOODCLIFF LAKE N J ; ROCKEFELLER WINSTON GARDNER WOODCLIFF LAKE NJ ; WINSTON GARDNER ROCKEFELLER

International class (IPC 8-9): A47K10/38 A47K7/00 A47L13/17 B26F3/02 B65D25/52 B65H16/00 (Advanced/Invention); A47K10/24 A47K7/00 A47L13/16 B26F3/02 B65D25/38 B65H16/00 (Core/Invention)

International class (IPC 1-7): A47K10/32 A47K10/34 A47K10/36 A47K10/38 A47K10/42 B26F3/02 B65D25/52 B65D83/00 B65D83/08 B65H35/10 B65H75/32

CPC: Y10T225/393 A47K10/3809 A47K2010/3266 A47L13/17

European class: A47K10/38B A47L13/17 K47K10/32W

US class: 118/43 225/106

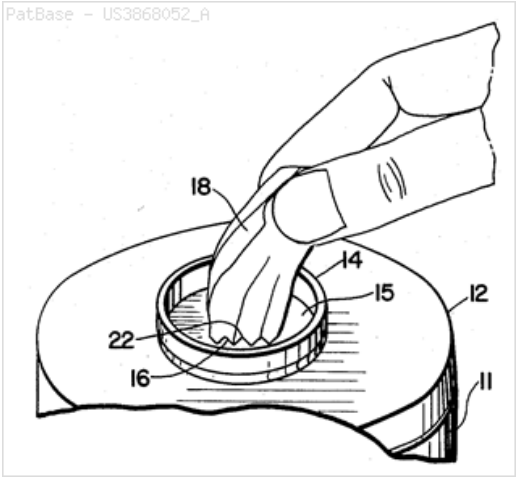
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Cited documents: US3775801 A, US3524602 A, US3523653 A, US3368522 A, US3325003 A, US3269593 A, US3229876 A, US3173601 A, US3160337 A, US3150808 A, US3098594 A, US3019944 A, US3002668 A, US2974852 A, US2927714 A, US2840267 A, US2840266 A, US2806591 A, US2633984 A, US2440974 A, US2317102 A, US2004614 A, JP47001539 U, GB803978 A, FR1371953 A, DE2044265 A1, DE2027808 A1, DE1688184 U, AT1937 B,

Forward Citations: WO9617794, WO11008839, WO08085090, WO05063107, WO03076305, WO03031283, WO0200527, USRE40408, USRE34324, USD809917, USD773930, USD771489, USD624405, USD617060, USD606276, USD589660, USD564363, USD542652, USD540670, USD522780, USD509736, USD504794, USD479420, USD479419, USD466807, USD462217, USD461083, USD458067, USD457366, USD449528, USD448290, USD446452, USD445028, USD444063, USD443451, US9694554, US9265386, US8944279, US8814021, US8757432, US8573398, US8511511, US8430288, US8425393, US8245876, US8202209, US8186541, US8104657, US7992745, US7992744, US7794382, US7661554, US7578414, US7465266, US7188799, US7081080, US7070143, US7063245, US7028840, US6971542, US6921024, US6910579, US6905748, US6903307, US6848595, US6847011, US6840401, US6766919, US6758368, US6749083, US6745975, US6715633, US6705565, US6702227, US6659391, US6639185, US6612462, US6604651, US6592004, US6585131, US6550633, US6537631, US6523690, US6170426, US6158614, US6085899, US5727721, US5566873, US5560514, US5520308, US5141171, US5137173, US5118022, US5097998, US5024349, US4930385, US4793539, US4784290, US4535912, US4534491, US4526291, US4524895, US4462507, US4436221, US4328907, US4289262, US4274573, US4262816, US4219129, US4171047, US4159772, US3986479, US2014194269, US2013175283, US2013075417, US2012001014, US2011210138, US2011011878, US2011011876, US2011011767, US2010311558, US2010102077, US2010029456, US2010001015, US2009325773, US2008308446, US2007194036, US2007131703, US2007045335, US2007000936, US2006283874, US2006283751, US2006266761, US2006266663, US2006118567, US2006102642, US2006070990, US2005269344, US2005263534, US2005236416, US2005046314, US2005040179, US2004251291, US2004182875, US2004149833, US2004118862, US2004115393, US2003111481, US2002195764, US2002088815, JP6270949, JP54130940, JP2011068360, FR2440724, EP2099347, EP1480898, EP1333868, EP1308401, EP0419063, EP0110473, DE9108036, DE8809213, DE3514943, DE3319754, DE3319754, DE2849366, DE2802443, DE2802443, DE2623976, DE2603085, DE102008012178, AU631001, AU2007342720, AT383567,

Abstract:
Source: US3868052A A sheet material **dispensing** **container** encloses a moisture saturated supply such as a roll of successive sheets of predetermined size connected by transverse perforation or score lines, the leading sheet being withdrawn from the supply through a normally **open** aperture having free projections at one or more side edges to engage the perforation or score lines and insure separation of each leading sheet during withdrawal.

PatBase - US3868052_A



443) Family number: 1893735 (US4023713A)

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Title: Apparatus for batchwise feeding of powders or particles

Priority: DE19732310358 19730302 US19740447418 19740301 US19750619538 19751003

Family:

Publication number	Publication date	Application number	Application date
AT136974 A	19850715	AT19740001369	19740220
AT379894 B	19860310	AT19740001369	19740220
BE811682 A	19740617	BE19740141478	19740228
BR7401532 A0	19741231	BR19740001532	19740301
CA1014906 A1	19770802	CA19740193834	19740301
CS216824 B2	19821126	CS19740001488	19740228
DE2310358 A1	19740912	DE19732310358	19730302
DE2310358 B2	19750724	DE19732310358	19730302
DE2310358 C3	19760429		19730302
FR2219894 A1	19740927	FR19740007012	19740301
FR2219894 B1	19780602	FR19740007012	19740301
GB1435645 A	19760512	GB19740008465	19740225
IT1008312 A	19761110	IT19740048689	19740225
JP1028715 C3	19810122	JP19740024695	19740302
JP50024977 A2	19750317	JP19740024695	19740302
JP55016938 B4	19800508	JP19740024695	19740302
LU69508 A	19740605	LU19740069508	19740228
SE423377 B	19820503	SE19740002768	19740301
SE423377 C	19820812	SE19740002768	19740301
SU576067 D	19771005	SU19742000554	19740228
SU576067 T	19771005	SU19742000554	19740228
US4023713 A	19770517	US19750619538	19751003
ZA7401305 A	19750226	ZA19740001305	19740227

Probable Assignee: KLOCKNER CRA PATENT GMBH

Assignee(s):(std)**:** MAXIMILIANSHUETTE EISENWERK

Assignee(s): KLOCKNER CRA TECHNOLOGIE GMBH ; KLOCKNER CRA PATENT GMBH ; MANTEY PAUL GERHARD ; BROTZMANN KARL ; EISENWERK GES MAXIMILIANSHUETTE MBH ; EISENWERK GES MAXIMILIANSHUTTE MBH ; EISENWERK GESELLSCHAFT MAXIMILIANSHUETTE M B H ; EISENWERK GESELLSCHAFT MAXIMILIANSHUETTE MBH ; EISENWERK GESELLSCHAFT MAXIMILIANSHUETTE MBH 8458 ; EISENWERK MAXIMILIANSHUTTE GMBH DT ; EISENWERK GESELLSCHAFT MAXIMILIANSHUTTE MBH ; EISENWERKE GES MAXIMILIANSHUETTE MBH ; EISENWERK MAXIMILIANSHUTTE GMBH ; EJZENVERK GEZELSHAFT MAKSIMILIANSKHYUTTE MBKH FIR ; EISENWERK GESELLSCHAFT MAXIMILIANSHUTTE MBH DE ; EISENWERK GESELLSCHAFT MAXIMILIANSHUETTE MBH 8458 SULZBACH ROSENBERG ; EISENWERK-GESELLSCHAFT MAXIMILIANSHUETTE MBH 8458 SULZBACH-ROSENBERG ; EJZENVERK GEZELSHAFT MAKSIMILIANSKHYUTTE MBKH FIRMA ; GRAPENGIESSER JOHANN C ; FASSBINDER HANS G ; HANSEN ALFRED

Inventor(s):(std)**:** BROTTSMANN KARL ; BROTZMANN K ; BROTZMANN KARL ; BROTZMANN KARL DR ; FASSBINDER GANS GEORG ; FASSBINDER H ; FASSBINDER H G ; FASSBINDER HANS ; FASSBINDER HANS G ; FASSBINDER HANS GEORG ; FASSBINDER HANS GEORG DR ; FASSBINDER HANS-GEORG DR ; GANZEN ALFRED ; GRAPENGIESSER C ; GRAPENGIESSER J ; GRAPENGIESSER J C ; GRAPENGIESSER JOHAN C ; GRAPENGIESSER JOHANN C ; GRAPENGIESSER JOHANN CLAUS ; GRAPENGISSER IOGANN KLAUS ; HANSEN A ; HANSEN ALFRED ; MANTEJ PAUL GERKHARD ; MANTEY P ; MANTEY P G ; MANTEY PAUL GERHAAED ; MANTEY PAUL GERHARD ; MANTEY PAUL-GERHARD

Inventor(s): P G MANTEY ; PAUL GERKHARD MANTEJ DT ; MANTEY PAUL GERHARD 8450 AMBERG ; MANTEY PAUL GERHAAED DE ; HANSEN ALFRED DE ; IOGANN KLAUS GRAPENGISSER DT ; J C GRAPENGIESSER ; K BROTZMANN ; KARL BROTTSMANN DT ; H G FASSBINDER ; GRAPENGIESSER JOHAN C DB ; GEORG DR FASSBINDER HANS ; 8458 SULZBACH ROSENBERG ; A HANSEN ; ALFRED GANZEN DT ; GANS GEORG FASSBINDER DT ; FASSBINDER HANS DE ; BROTZMANN KARL DE

International class (IPC 8-9): B01J8/00 B65D90/64 B65G53/40 B65G53/46 F01L15/18 G01F11/00 G01F11/34 G01F3/20 (Advanced/Invention);
B01J8/00 B65D90/00 B65G53/40 G01F11/00 (Core/Invention)

International class (IPC 1-7): B01F15/02 B01F5/00 B65B1/00 B65D90/58 B65G53/12 B65G53/40 B65G65/52 B65G65/56 B67D5/54 C21C5/28 C21C5/46 G01F11/00 G01F13/00

CPC: B65G53/40 B01J8/0035 G01F11/34

European class: B01J8/00F8 B65G53/40 G01F11/34

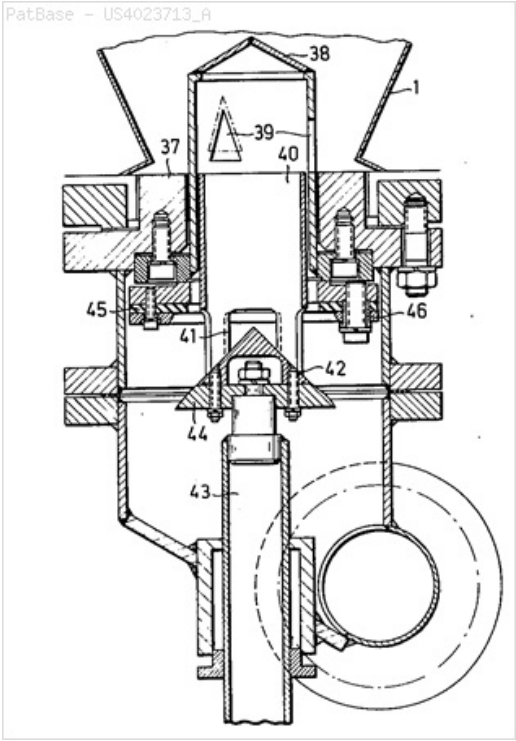
US class: 222/193 222/453 406/128 406/28

Classification Explorer

Cited documents: US3528588 A, US2949275 A, US2807393 A, US2521347 A, GB1144091 A,

Forward Citations: US5490745, US5340241, US4668478, US4197873, NL2003298, JP54065964, FR2587780, ES2144941, EP0166959, EP0144018, DE3933764, DE3933763, DE3507973, DE3049510, CN105526349, CN105526349, CN103612916, CN103612916, CN103464047, CN103464047,

Abstract:
Source: US4023713A Apparatus for batchwise feeding of powders or other particulate materials from a pressurized supply vessel with a **sealable** discharge orifice including a movable **sealing**-and-metering member and a **seal** against which it **seals** during periods of non-discharge.


PatBase - US4023713_A
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444) Family number: 4215203 (US3815794A)

Title: PLASTIC-FILM **CONTAINERS** WITH SELF-**SEALING** ORIFICES

Priority: US19720231288 19720302 US19720256850 19720525 US19740477755 19740610 US19750615816 19750922 US19730326278 19730124 US19730427433 19731221 US19760650468 19760119 US19760714746 19760816 US19780941721 19780912 US19810244065 19810316

Family:

Publication number	Publication date	Application number	Application date
CA998977 A1	19761026	CA19740215726	19741211
US3815794 A	19740611	US19720231288	19720302
US3878977 A	19750422	US19740477755	19740610
US3933563 A	19760120	US19730326278	19730124
US3975885 A	19760824	US19730427433	19731221
US4053671 A	19771011	US19750615816	19750922
US4055452 A	19771025	US19760650468	19760119
US4113169 A	19780912	US19760714746	19760816
US4256024 A	19810317	US19780941721	19780912
US4430069 A	19840207	US19810244065	19810316

Probable Assignee: AMERICAN NATIONAL CAN CO

Assignee(s):(std)**:** AMERICAN CAN CO ; CARLISLE R ; CARLISLE RICHARD S

Assignee(s): CARLISLE R US ; AMERICAN CAN COMPANY ; AMERICAN CAN PACKAGING INC ; AMERICAN NATIONAL CAN CO

Inventor(s):(std)**:** CARLISLE R ; CARLISLE RICHARD S

Inventor(s): CARLISLE R US

International class (IPC 8-9): B26F3/06 B29C65/00 B29C65/02 B29C65/18 B29C65/24 B29C65/74 B29C65/78 B65B9/02 B65D30/10 B65D33/36 B65D33/38 B65D75/00 B65D75/48 B65D75/58 (Advanced/Invention); B26F3/06 B29C65/00 B29C65/02 B29C65/18 B29C65/74 B29C65/78 B65B9/00 B65D30/10 B65D33/36 B65D75/00 B65D75/52 (Core/Invention)

International class (IPC 1-7): B31B1/14 B31B1/64 B32B3/02 B32B3/26 B32B31/00 B32B31/18 B32B31/20 B32B31/26 B32B7/04 B32B7/06 B65B3/02 B65B9/02 B65D1/32 B65D27/10 B65D33/36 B65D35/08 B65D37/00

CPC: B65D75/48 Y10S206/82 Y10S383/906 B29C65/305 B65D75/5822 B65D2575/586 B65D75/008 B29C66/81457 B29C65/224 B29C65/7412 B29C65/749 B29C65/7841 B29C65/7891 B29C66/003 B29C66/004 B29C66/005 B29C66/1122 B29C66/137 B29C66/3282 B29C66/3452 B29C66/3472 B29C66/3474 B29C66/53262 B29C66/63 B29C66/73921 B29C66/8161 B29C66/81821 B29C66/8322 B29C66/849 B29C66/929 B29C66/949 B65B9/023 B26F3/06 B65B9/02 B29C65/18 B29C65/743 B29C65/7441 B29C66/83421 B29K2023/06 B29K2101/12 B29C66/00461 B29C66/0046 B29C66/8122 B29C66/8181 B29C66/81871 B29C66/8187 B29C66/91421 B29C66/91431 B29C66/91655 B29C66/81415 B29C66/81422 B29C66/81427 B29C66/81431 B29C66/91933 B29C66/91423 B29C66/91921 B29C66/919 B29C66/73116 B29C66/9221 B29C66/9241 B29C66/922 B29C66/43121 Y10T156/1054 Y10T156/1313 Y10T428/24488 Y10T428/24612 Y10T428/24777 Y10T428/24802 B29C66/944 B29C66/954 B29C66/961 B29C66/81264 B29K2995/007 B29C65/7437 B29C66/71 B29C66/0044 B29C66/0042 B29C66/81241 B29C66/431 B29C65/245 B29C65/28 B29C65/30 B29C66/81261 B29C66/244 B29C66/242 B29C66/712 B29C66/8242 B29C66/723 B32B3/02 B29C66/83531 B32B7/02 B32B27/08 B32B38/0004 B32B2398/20 B29C66/133 B29C66/232 B29C66/43

European class: B26F3/06 B29C65/00H22B B29C65/02 B29C65/02T22 B29C65/18 B29C65/24 B29C65/7412 B29C65/743 B29C65/7441 B29C65/7461 B29C65/749 B29C65/74B1B B29C65/74D B29C65/74D10 B29C65/74E10 B29C65/74H B29C65/78M10B B29C66/003 B29C66/004 B29C66/0044 B29C66/0046 B29C66/005 B29C66/1122 B29C66/137 B29C66/3282 B29C66/3472 B29C66/43 B29C66/63 B29C66/80 B29C66/81457 B29C66/83421 B29C66/8351 B29C66/83531 B65B9/02 B65B9/02B B65D75/00E B65D75/48 B65D75/58D1 L29C65/24B L29C65/7412 L29C65/78F L29C66/24 L29C66/242 L29C66/24221 L29C66/244 L29C66/3472 L29C66/8122 L29C66/81821 L29C66/83531 L29C66/91921 L29C66/91933 L29K101/12 L29K23/06 L65D575/58R

US class: 156/182 156/251 156/289 156/290 156/308.4 156/515 156/582 156/583.3 206/820 222/107 222/49.1 222/491 222/530 229/53 229/69 383/37 383/43 383/44 383/49 383/906 428/157 428/172 428/192 428/195.1 493/194 493/203 493/207 493/209 493/343 53/29 53/452 53/558

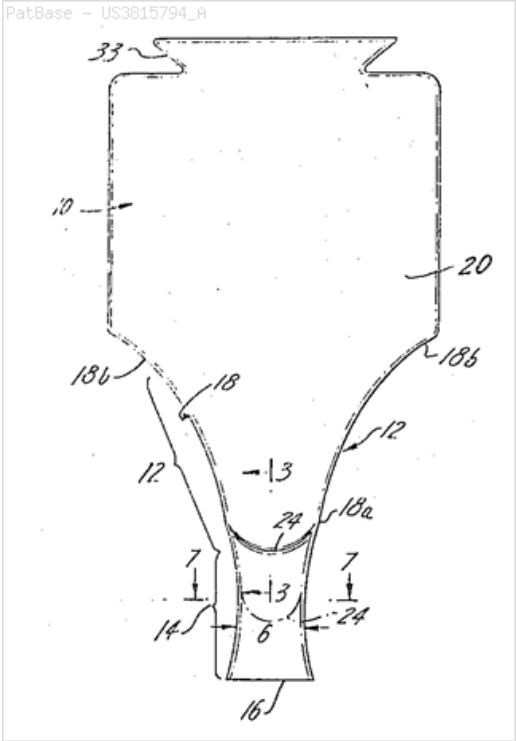
Classification Explorer

Cited documents: US4140046 A, US4053671, US3947198, US3916148 A, US3868291, US3857485 A, US3817017 A, US3815794 A, US3779449 A, US3765990 A, US3749593 A, US3736219 A, US3687789, US3667188 A, US3651615 A, US3629035 A, US3610477 A, US3599388 A, US3528876 A, US3522135 A, US3513052, US3508754 A, US3495992 A, US3469768 A, US3453797 A, US3441460 A, US3423277 A, US3390507 A, US3381446 A, US3340679 A, US3334004 A, US3303081 A, US3278085 A, US3237533, US3192091 A, US3182728 A, US3166459, US3149017 A, US3139365 A, US3112047 A, US3087845 A, US3039246 A, US3023679 A, US3009498 A, US3008862 A, US2990101 A, US2935241 A, US2929601 A, US2743761, US2735797 A, US2714416 A, US2707581 A, US2691259 A, US2663461 A, US2552353, US2466387 A, US2272251 A, US2232640 A, US2232062 A, US1246898 A, US1145093 A, FR1003160 A, CA646868 A,

Forward Citations: WO9524343, WO9524343, WO9512531, WO8905759, WO8501252, WO15112552, WO12143768, WO04087526, WO04011211, WO0226589, USD627527, USD525144, USD523758, USD501789, USD501399, USD501398, USD500951, USD498416, US9751273, US9434106, US9433468, US9415918, US9238343, US9016521, US8931664, US8707659, US8376183, US8281839, US8118198, US8117805, US8105226, US8061563, US8029428, US8025944, US8012076, US8001747, US7980243, US7963955, US7960002, US7942996, US7908829, US7896794, US7833379, US7802568, US7793655, US7658542, US7500479, US7445590, US7270479, US7241066, US7213593, US7201291, US7090093, US6988496, US6952910, US6932241, US6776307, US6692147, US6685691, US6648044, US6635139, US6446847, US6244468, US5996845, US5976317, US5941640, US5743997, US5645671, US5537802, US5529224, US5505809, US5474637, US5458730, US5411178, US5376220, US5374179, US5335486, US5307955, US5292392, US5246122, US5207355, US5177931, US5074944, US5067635, US5018646, US5015223, US5005734, US5000350, US4999081, US4997104, US4988016, US4935088, US4917267, US4863667, US4820468, US4798324, US4692135, US4642972, US4627551, US4564127, US4545844, US4491245, US4470240, US4430069, US4411623, US4384440, US4380484, US4328912, US4317321, US4312689, US4270965, US4252257, US4217890, US4171755, US4163509, US4160852, US4034758, US3977404, US3923210, US3878977, US2016122103, US2016113377, US2015144659, US2015065970, US2015033671, US2015018789, US2014370147, US2014116002, US2013341350, US2013228591, US2013026183, US2012269966, US2012144780, US2012125477, US2011304132, US2011226813, US2011220272, US2011160029, US2011146208, US2010181021, US2010170618, US2010008602, US2009308023, US2009305859, US2009304960, US2009272079, US2009220176, US2009098992, US2009082186, US2008313998, US2008312056, US2008300121, US2008233252, US2008033391, US2007228073, US2007167304, US2006254697, US2006185789, US2006182370, US2006016449,

US2005241634, US2005236428, US2005235991, US2005167040, US2004252915, US2004247884, US2004226646, US2004222238, US2004182867, US2004159674, US2004143235, US2004096127, US2004052437, US2003230604, JP4754477, GB2157228, FR2871408, FR2860172, FR2482898, ES2139494, EP1541303, EP1436203, EP1375381, EP1193187, DE4012073, DE29707115, CN102935718, AU682215, AU681497, AP1937,

Abstract:
Source: US3815794A The disclosed **containers** are formed of supple plastic films fused together face-to-face along continuous seams that converge in the fluid-discharge direction to form a spout. When part of the spout is distended by fluid contents, a **seal** forms between the films. Squeezing the **container** develops internal fluid pressure that causes release of the **seal**. Depending on the proportions of the spout, the **seal** is either self-restoring when pressure is relaxed, or the **seal** remains **open** until it is manually restored. The form of the spout also determines the character of the discharge, whether a continuing stream, or a limited-quantity discharge, or a fine jet that breaks up into a spray.



445) Family number: 1122157 (US3864256A)

© PatBase

Title: FILTER CENTRIFUGE AND METHOD OF OPERATING SAME

Priority: DE19722260461 19721211 DE19728226046 19721211 DE19732331196 19730619 DE19732331202 19730619 DE19738233120 19730619 US19730423579 19731210 US19740480159 19740617 US19760662163 19760227

Family:

Publication number	Publication date	Application number	Application date
AT336643 B	19770510	AT19730009639	19731116
AT963973 A	19760915	AT19730009639	19731116
AU197362454 A1	19750515	AU19730062454	19731113
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CA1012469 A1	19770621	CA19730187801	19731210
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CH580986 A	19761029	CH19730014747	19731018
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DE2260461 A1	19740704	DE19722260461	19721211
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DE2331196 C2	19820826	DE19732331196	19730619
DE2331202 A1	19750130	DE19732331202	19730619
DK148378 B	19850624	DK19730006710	19731211
DK148378 C	19860303	DK19730006710	19731211
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ES444226 A1	19770501	ES19760444226	19760112
FR2209613 A1	19740705	FR19730042088	19731127
FR2209613 B1	19781110	FR19730042088	19731127
FR2234042 A1	19750117	FR19740018350	19740528
FR2234042 B1	19781117	FR19740018350	19740528
GB1457518 A	19761201	GB19730055537	19731129
GB1457519 A	19761201	GB19740020899	19740510
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JP53002510 B4	19780128	JP19740069611	19740618
JP53021532 B4	19780703	JP19730138514	19731211
JP924531 C3	19780922	JP19740069611	19740618
JP946292 C3	19790330	JP19730138514	19731211
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NL172834 C	19830601	NL19730016125	19731126
NL7316125 A	19740613	NL19730016125	19731126
SE398051 B	19771205	SE19740008040	19740618
SE398051 C	19780323	SE19740008040	19740618
SE398449 B	19771227	SE19730016507	19731206
SE398449 C	19780406	SE19730016507	19731206
SE7408040 A	19741220	SE19740008040	19740618
SU610473 D	19780605	SU19742016434	19740410
SU651660 D	19790305	SU19731976218	19731210
US3864256 A	19750204	US19740480159	19740617
US3943056 A	19760309	US19730423579	19731210
US4052303 A	19771004	US19760662163	19760227
ZA7309354 A	19741127	ZA19730009354	19731210

Probable Assignee: KRAUSS MAFFEI AG

Assignee(s):(std)**:** KRAUSS MAFFAJ AG ; KRAUSS MAFFEI AG

Assignee(s): KRAUSS MAFFEI AG DT ; KRAUSS MAFFEI AG 8000 MUENCHEN ; KRAUSS MAFFEI AG 8000 MUENCHEN DE ; KRAUSS MAFFAJ OPMA AG ; KRAUSS MAFFAJ AG FA ; KRAUSS MAFFEI 8000 MUENCHEN AG ; KRAUSS MAFFEI 8000 MUENCHEN DE AG ; KRAUSS MAFFER AKTIENGESELLSCHAFT ; KRAUSS MAFFEI AKTIENGESELLSCHAFT ; KRAUSS MAFFEI AKTIENGESELLSCHAFT TE MUENCHEN BONDSREPUBLIEK DUITSLAND ; NIEDNER PETER ; OSTERMEYER PETER ; ZEPPENFELD KURT ; KRAUSS MAFFEI DT AG ; KRAUSS MAFFER AG ; KRAUSS MAFFEI TE MUENCHEN BONDSREPUBLIEK DUITSLAND AG ; HULTSCH GUNTHER ; KRAUS MAFFEI A G ; KRAUS MAFFEI AG

Inventor(s):(std)**:** HULTSCH G ; HULTSCH GUENTHER ; HULTSCH GUNTHER ; NIDNER PETER ; NIEDNER P ; NIEDNER PETER ; NIEDNER PETER DR ING ; OOSTERMEYER P ; OSTERMAYER PETER ; OSTERMEJER PETER ; OSTERMEYER P ; OSTERMEYER PETER ; PETER NIEDNER ; TSEPPENFELD KURT ; ZEPPENFELD K ; ZEPPENFELD KURT ; ZEPPENFELD KURT DIPL ING ; KHULCH GYUNTER

Inventor(s): KURT TSEPPENFELD DT ; KURT ZEPPENFELD ; ZEPPENFELD KURT DIPL ING 8000 MUENCHEN DE ; PETER OSTERMAYER ; PETER OSTERMEJER DT ; PETER OSTERMEYER ; P NIEDNER ; P OSTERMEYER ; PETER NIDNER DT ; K ZEPPENFELD ; HULTSCH GUENTHER 8000 MUENCHEN DE ; G HULTSCH ; GUENTHER HULTSCH ; GUNTHER HULTSCH ; GUNTHER KOLISCH KURT ZEPPENFELD PETER MEHNER AND PETER OSTERMEYER ; GYUNTER KHULCH DT

International class (IPC 8-9): B01D21/26 B01D33/11 B04B11/02 B04B15/08 B04B3/00 B04B3/04 (Advanced/Invention); B01D21/26 B01D33/06 B04B11/00 B04B15/00 B04B3/00 (Core/Invention); B04B (Subclass/Invention)

International class (IPC 1-7): B01D21/26 B01D33/02 B01D33/06 B01D33/38 B04B11/00 B04B15/08 B04B3/00 B29C27/16

CPC: Y10S494/90 B04B15/08 B01D33/11 B01D2201/206 B01D2201/208 B01D2201/282 B04B3/00 B04B3/04 B04B11/02 B04B11/082 B01D33/74 B01D33/82

European class: B01D33/11 B04B11/02 B04B15/08 B04B3/00 B04B3/04 L01D201/20V2 L01D201/20V4 L01D201/28H

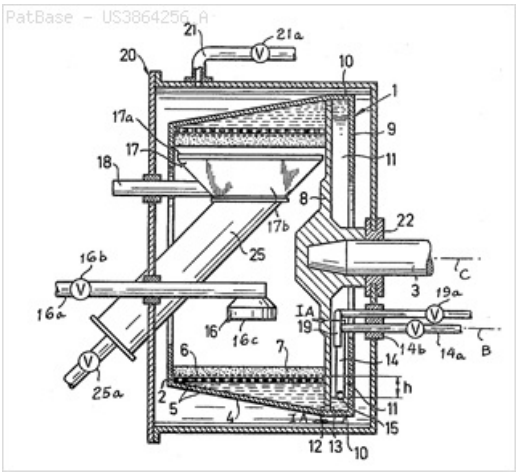
US class: 210/217 210/369 210/373 210/378 210/380.3 210/744 210/78 210/781 210/808 494/26 494/29 494/30 494/36 494/39 494/57 494/58 494/6 494/900

Classification Explorer

Cited documents: US3814246 A, US3799353 A, US3797663 A, US3788470 A, US3396103 A, US3377019 A, US3333704 A, US3302794 A, US2982417 A, US2862659 A, US2398967 A, US2106986 A, US1761593 A, US1336722 A, US1138608 A, GB983690 A, FR650716 A, DE617705 A, DE1632302 A1, DE1532689 A1,

Forward Citations: WO9604995, WO8002389, WO15050439, WO10090418, WO10090418, US9604159, US8790519, US8574143, US8540078, US8382712, US7628749, US7540944, US7204795, US6695951, US6488849, US6440316, US5713826, US5676835, US5458775, US5316685, US5300233, US5032258, US4997575, US4895666, US4832853, US4814076, US4652254, US4642186, US4614579, US4362620, US4279741, US4101421, US2010317099, US2010314334, US2010038294, US2008053482, US2007114161, US2006191156, US2005045466, US2004176233, RU172014, KR101134279, JP61094727, JP57056209, JP54128106, JP53105768, JP53004259, GB2361879, GB2361879, GB2308314, GB2308314, FR2511895, EP2902112, EP0342455, EP0247401, EP0177838, EP0155632, EP0149414, DE3626317, DE3626314, DE29713919, DE2909772,

Abstract:
Source: US3864256A A filter centrifuge wherein a drum is rotated about a central axis at high speed so as to drive the liquid phase of a liquid-solid suspension out through a filter medium has a liquid-collecting chamber radially outside of the filter medium and provided with an outlet from which the liquid passing through the filter cake is expelled. A venturi pump in the drum has a suction side connected to the liquid-collecting compartment radially inwardly of the outlet thereof so as to produce a negative-pressure gas head that serves to draw air and any remaining liquid through the filter cake after most of the liquid phase has been drawn off. In addition during operation of the filter centrifuge this venturi pump, which may be driven by the liquid phase as it issues from the compartment or by a fluid fed especially into the drum for this purpose, serves to maintain a predetermined negative pressure in the compartment under the filter medium.



446) Family number: 1078843 (US3817017A)

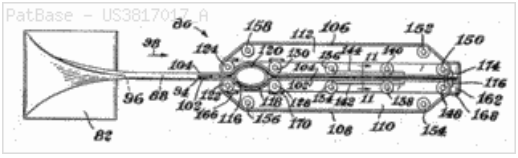
Title:	**BAG** CONSTRUCTION AND METHOD FOR FILLING THE SAME
Priority:	US19700081500 19701013 US19730351970 19730417

Family:

Publication number	Publication date	Application number	Application date
US3817017 A	19740618	US19730351970	19730417

Probable Assignee:	PLASTIC FILMS INC
Assignee(s):(std)**:**	TITCHENAL O
Assignee(s):	TITCHENAL O US ; BASIC OHIO ACQUISITION CORP ; PLASTIC FILMS INC
Inventor(s):(std)**:**	TITCHENAL O
Inventor(s):	TITCHENAL O US
International class (IPC 8-9):	B65B43/12 B65B43/26 (Advanced/Invention); B65B43/00 B65B43/26 (Core/Invention)
International class (IPC 1-7):	B65B43/12 B65B43/26
CPC:	B65B43/123 B65B43/267
European class:	B65B43/12B B65B43/26D
US class:	53/24 53/437 53/459 53/525
Classification Explorer	
Cited documents:	US3501085 A, US3359703 A, US1628215 A,
Forward Citations:	WO9957017, WO9422720, WO9114622, WO7900655, WO14122488, USRE40284, USRE39505, US9844911, US9828125, US8689529, US7500479, US7048441, US6823650, US6799622, US6591586, US6506429, US6279298, US6148588, US6058681, US6055796, US5996319, US5987856, US5944424, US5887412, US5806276, US5743070, US5722218, US4850178, US4756144, US4654878, US4569083, US4558556, US4430844, US3975885, US2015360897, US2015210031, US2012090271, US2005281495, US2005235991, US2005121099, US2003180486, US2001036496, ES2068069, EP0630817, EP0553886, EP0542336, EP0449365, EP0250946, EP0003839, CZ302751, AU753412,

Abstract:
Source: US3817017A A **bag** construction embodied in a chain of connected **bag** elements and an efficient method for filling the same. In novel feeding and mounting concepts, the chain of **bag** elements is preferably fed to the filling apparatus from a folded pile, and is initially received by a mandrel which mounts the same in a curtain-and-rod-like fashion by means of a loop located along the top end of each **bag**. In the chain, the **bag** elements are substantially separated from one another such that their complete separation after filling can be easily achieved, as for example, by a gentle pulling action. In specific **bag** constructions, loading or filling through gusseted sections of the **bag** elements is made possible through novel gusset designs and filling methods, and scrap minimized, for example, by thinning strategic portions of the **bag** elements which later are customarily trimmed therefrom following **sealing** operations.



447) Family number: 1081757 (US3820655A)

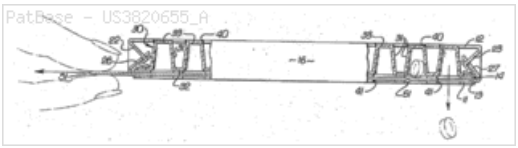
Title:	ARTICLE HOLDING AND **DISPENSING** **CONTAINER**
Priority:	US19720237772 19720324

Family:

Publication number	Publication date	Application number	Application date
US3820655 A	19740628	US19720237772	19720324

Probable Assignee:	TOURETTE C
Assignee(s):(std):	CONSOLIDATED EUREKA PAPERBOX I ; MULLEN P ; RX PAK CO ; TOURETTE C
Assignee(s):	RX PAK CO US ; MULLEN P US ; CONSOLIDATED EUREKA PAPERBOX INC US ; LA TOURETTE C US
Inventor(s):(std):	LA TOURETTE C ; MULLEN P
Inventor(s):	MULLEN P US ; LA TOURETTE C US
International class (IPC 8-9):	B65D83/04 (Advanced/Invention); B65D83/04 (Core/Invention)
International class (IPC 1-7):	B65D83/04
CPC:	B65D83/0445
European class:	B65D83/04C
US class:	206/42 206/459.5 206/532 206/539
Classification Explorer	
Forward Citations:	WO8303518, US9387153, US8869984, US8239214, US7967143, US7894656, US7780009, US7699173, US7669733, US7641073, US7549268, US7451583, US6779663, US6705487, US5954202, US4169531, US2011163156, US2011011756, US2010213097, US2009057184, US2008149657, US2008149522, US2008114818, US2008104929, US2008099499, US2008077274, US2008071648, US2007296598, US2007277477, US2007062156, US2006249420, US2005191544, US2005051459, US2003019881, EP0940353,

Abstract:
Source: US3820655A A **container** for holding and **dispensing** individual articles has a transparent compartmented article holding tray with an associated frangible **closure** formed from a single sheet of material with individual, separable pull **tabs** maintained in operable pre-pulled closed condition relative to said tray by an associated **cover** having **dispensing** apertures aligned to the tray compartments normally closed by said pull **tabs**. The pull **tabs** are provided with indicia on an underside viewable through the transparent bottoms of the tray compartments to facilitate noting the number of articles **dispensed** and/or retained in the tray. In one version of the **container**, the **closure**, **cover** and associated panels forming a sleeve-like body foldable about the tray with end closing flaps are die cut from a single sheet of paper stock or plastic material. In another version, a **cover** panel, with **dispensing** apertures cut therein is secured directly to top portions of the **dispensing** tray with the **closure** positioned therebetween, the associated pull **tabs** lying in guide channels formed in upper portions of the tray. In each version of the **container** disclosed, the pull **tabs** of the **closure** comprise one or more individual longitudinally extending **tabs** formed integrally of one another from a sheet of material with non-cut interconnecting portions of that material joining such **tabs** while in their assembled tray closing position prior to pulling of any one or more of the **tabs** for sequential **dispensing** of individual articles from the associated tray compartments, such interconnections being frangible upon manual pulling of associated ends of said **tabs**. 7 Claims, 10 Drawing Figures



448) Family number: 1082954 (US3822164A)

Title:	APPARATUS FOR **SEALING** PLASTIC **BAGS**
Priority:	US19710201830 19711124 US19740472551 19740523

Family:

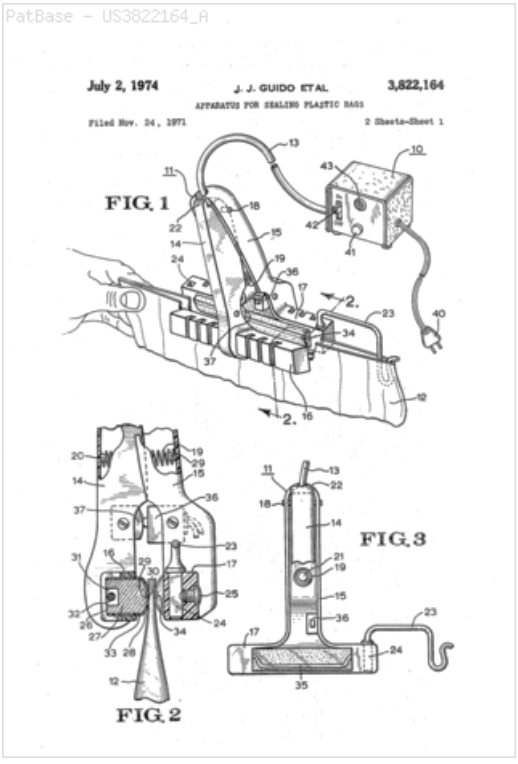
Publication number	Publication date	Application number	Application date
US3822164 A	19740702	US19710201830	19711124
US3867226 A	19750218	US19740472551	19740523

Probable Assignee:	CO POLY EX CORP
Assignee(s):(std):	ANDERSON JAMES R ; CO POLY EX CORP ; GUIDO JOSEPH J
Assignee(s):	CO POLY EX CORP US
Inventor(s):(std):	ANDERSON J ; ANDERSON JAMES R ; GUIDO J ; GUIDO JOSEPH J
Inventor(s):	GUIDO J US ; ANDERSON J US
International class (IPC 8-9):	B29C65/22 B29C65/38 B65B51/14 (Advanced/Invention); B29C65/00 (Advanced/Non-invention); B29C65/18 B29C65/38 B65B51/14 (Core/Invention); B29C65/00 (Core/Non-invention)
International class (IPC 1-7):	B32B31/00 B32B31/20
CPC:	B29C66/83241 B29C66/1122 B29C66/43121 B29C65/222 B29C65/228 B29C66/8614 B29C65/38 B29C66/91 B65B51/148 B29C66/872 B29C66/81821 B29C66/81871 B29C66/81422 Y10T156/18 B29C66/944 Y10T307/951 B29C66/8221 B29C66/8227 B29C66/8286
European class:	B29C65/22 B29C65/38 B29C66/861 B29C66/872 B29C66/90 B65B51/14T L29C66/91 L29C66/94
US class:	156/229 156/308.4 156/35.8 156/358 156/359 156/366 156/494 156/579 156/583.2 219/230 219/243 307/141 383/7 383/8 53/134.1 53/374.9 53/390 53/413 53/479

Classification Explorer

Cited documents:	US3712844 A, US3701699 A,
Forward Citations:	WO9941076, WO9601730, WO9108141, WO17160780, WO04041539, US9358726, US7454884, US7401452, US7315010, US7291810, US7231753, US7131250, US7076929, US7034252, US7003928, US6998577, US6936790, US6630647, US6627853, US6573477, US6544382, US6392198, US6326594, US6232579, US6058998, US5667627, US5474637, US5472549, US5458730, US5403427, US5316464, US5177937, US5142123, US5140133, US4870251, US4770289, US4478025, US4349397, US4186292, US4123305, US4045274, US3992606, US3957557, US2012227897, US2007204561, US2007068120, US2006163237, US2006113292, US2005284858, US2005067398, US2005044814, US2004086025, US2004065051, US2001000608, RU176280, GB2465778, FR2851228, FR2731940, FR2660629, EP1052081, EP0468733, DE2844303, CN106182743, CN105217093,

Abstract:
Source: US3822164A ABSTRACT OF THE DISCLOSURE A portable hand-held impulse **sealer** for plastic **bags** or the like wherein a pair of complementary Nichromewire heating elements are heated upon actuation of the **sealer** for a predetermined period of time to bond opposite edges of the **open** end of a plastic **bag** together. A spacer rod depending from the **sealer** head enables **sealing** to be efficiently accomplished by a single operator by drawing the edges of the, **bag** together with the portions to be bonded positioned between the heating elements of the **sealer**. The duration of the heat cycle is automatically controlled by a novel solid-state triac timing circuit which can be adjusted to accommodate various kinds and thicknesses of material. A novel method for using the **sealer** to **seal** a plastic **bag** is also disclosed.



449) Family number: 1149607 (US3829373A)

© PatBase

Title: THIN FILM DEPOSITION APPARATUS USING SEGMENTED TARGET MEANS

Priority:
JP19730004874U 19721220 JP19730005001 19730109 JP19730005001 19731228
US19730428649 19731226 US19740436444 19740125 US19730323133 19730112
US19730322968 19730112 JP19740005001U 19731228 JP19740005001 19740107
US19750612859 19750912 US19740519781 19741101 US19750641481 19751217

Family:

Publication number	Publication date	Application number	Application date
AT341335 B	19780210	AT19740000096	19740107
AT344501 B	19780725	AT19760007760	19761019
AT776076 A	19771115	AT19760007760	19761019
AT9674 A	19770515	AT19740000096	19740107
AU197476853 A1	19760624	AU19740076853	19741224
AU197477056 A1	19760701	AU19740077056	19741231
AU197620598 A1	19780622	AU19760020598	19761216
AU511961 B2	19800918	AU19760020598	19761216
BE809464 A	19740708	BE19740139580	19740107
BE809466 A	19740708	BE19740139582	19740107
BE823921 A	19750416	BE19740151986	19741227
BE847413 A	19770419	BE19760171612	19761019
BR7410978 A0	19750826	BR19740010978	19741230
CA1016496 A1	19770830	CA19740189572	19740107
CA1018409 A1	19771004	CA19740215449	19741203
CA1018475 A1	19771004	CA19740189611	19740107
CA1031542 A1	19780523	CA19740217019	19741227
CA1077437 A1	19800513	CA19760263664	19761019
CH588565 A	19770615	CH19740000225	19740107
CH597622 A	19780414	CH19740000224	19740107
CH617965 A	19800630	CH19760013211	19761019
DD109035 C	19741012	DD19740175932	19740110
DD127637 C	19771005	DD19760195409	19761022
DE2400510 A1	19740718	DE19742400510	19740107
DE2400510 C2	19850523	DE19742400510	19740107
DE2400587 A1	19740718	DE19742400587	19740107
DE2461033 A1	19750710	DE19742461033	19741223
DE2647149 A1	19770630	DE19762647149	19761019
DE2647149 C2	19830825	DE19762647149	19761019
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DK469976 A	19770618	DK19760004699	19761019
ES208934 U	19760401	ES19740208934U	19741224
ES208934 Y	19760801	ES19740208934U	19741224
FR2255858 A1	19750725	FR19740043012	19741227
FR2255858 B1	19790223	FR19740043012	19741227
FR2322666 A1	19770401	FR19740000466	19740107
FR2322666 B1	19790126	FR19740000466	19740107
FR2322667 A1	19770401	FR19740000468	19740107
FR2322667 B1	19781027	FR19740000468	19740107
FR2335615 A1	19770715	FR19760031399	19761019
FR2335615 B1	19811204	FR19760031399	19761019
GB1461921 A	19770119	GB19740000644	19740107
GB1462241 A	19770119	GB19740000643	19740107
GB1463628 A	19770202	GB19740055984	19741230
GB1492778 A	19771123	GB19740054521	19741217
GB1503301 A	19780308	GB19760043369	19761019
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IL50722 A0	19761231	IL19760050722	19761019
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IT1002650 A	19760520	IT19740047682	19740114
IT1027202 A	19781120	IT19740070784	19741230
IT1066543 A	19850312	IT19760051804	19761019
JP1153086 C3	19830630	JP19740005001	19740107
JP1153087 C3	19830630	JP19740005003	19740107
JP1248763 C3	19850125	JP19740147702	19741224
JP1313063 C3	19860428	JP19760125438	19761019
JP49101273 A2	19740925	JP19740005001	19740107
JP49104972 A2	19741004	JP19740005003	19740107
JP49104972 U1	19740909	JP19730004874U	19721220
JP50097609 A2	19750802	JP19740147702	19741224
JP50097609 U1	19750814	JP19740005001U	19731228
JP52075669 A2	19770624	JP19760125438	19761019
JP57035392 B4	19820728	JP19740147702	19741224
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JP57047267 B4	19821008	JP19740005003	19740107
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MX145314 A	19820127	MX19760166694	19761018

NL180604 B	19861016	NL19740000145	19740107
NL180604 C	19870316	NL19740000145	19740107
NL7317670 A	19740716	NL19730017670	19731227
NL7317670 A1	19740716	NL19730017670	19731227
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NL7400145 A1	19740716	NL19740000145	19740107
NL7416919 A	19750701	NL19740016919	19741227
NL7611563 A	19770621	NL19760011563	19761019
SE392919 B	19770425	SE19740000351	19740111
SE392919 C	19770804	SE19740000351	19740111
SE429108 B	19830815	SE19760011581	19761019
SE429108 C	19831124	SE19760011581	19761019
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US3829373 A	19740813	US19730322968	19730112
US3884787 A	19750520	US19730323133	19730112
US3892396 A	19750701	US19730428649	19731226
US3905887 A	19750916	US19740436444	19740125
US3984901 A	19761012	US19740536999	19741227
US4013539 A	19770322	US19740519781	19741101
US4014779 A	19770329	US19750641481	19751217
US4026787 A	19770531	US19750612859	19750912

Probable Assignee: STORK COLORPROOFING BV

Assignee(s):(std)**:** COULTER INF SYSTEMS INC ; COULTER INFORMATION SYSTEMS ; COULTER SYSTEMS CORP ; TAKAMATSU I ; YOSHIDA KOGYO K K ; CARBORUNDUM CO ; YOSHIDA KOGYO KK

Assignee(s): YOSHIDA KOGYO TE TOKIO KK ; CARBORUNDUM CO THE ; COULTER SYSTEMS CORP BEDFORD MASS US ; COULTER SYSTEMS CORP 01730 BEDFORD MASS US ; KUURUTAA INFUOOMEESHIYON SHISUTEMUZU INC ; STORK RESEARCH A NETHERLANDS CORP BV ; COULTER SYSTEMS TE BEDFORD MASSACHUSETTS VER ST V AM CORP ; MONAGHAN GEORGE J ; TAKAMATSU IKUO ; KUEHNLE MANFRED R ; COULTER INFORMATION SYSTEMS INC ; COULTER INFORMATION SYST INC US ; COULTER INFORMATION SYSTEMS INC BEDFORD MASS V ST ; COULTER INFORMATION SYST INC ; COULTER INFORMATION SYSTEMS INC BEDFORD MASS V ST A ; COULTER INFORMATION SYSTEMS INC TE BEDFORD MASSACHUSETTS VER ST V AM ; STORK COLORPROOFING BV ; KENNECOTT CORP ; KENNECOTT MINING CORP ; STEMCOR CORP ; STORK RESEARCH BV ; YOSHIDA KOGYO JA KK

Inventor(s):(std)**:** KUEHNLE MANFRED R ; KUEHNLE MANFRED RUDOLF ; KUEHNLE M ; KUEHNLE M R ; MANFURETSUDO RUDORUFU KUENRU ; MONAGHAN GEORGE J ; MONAGHAN GEORGE JOSEPH ; TAKAMATSU IKUO

Inventor(s): RUDOLF KUEHNLE MANFRED ; KUEHNLE M US ; GEORGE JOSEPH MONAGHAN ; IKUO TAKAMATSU ; KUEHNLE MANFRED RUDOLF LEXINGTON MASS ; KUEHNLE MANFRED RUDOLF LEXINGTON MASS US ; KUEHNLE MANFRED RUDOLF LEXINGTON MASS V ST A ; KUEHNLE MR ; M R KUEHNLE ; MANFRED RUDOLF KUEHNLE

Agent(s): LM; SELIGSOHN GABRIELI AND CO

International class (IPC 8-9): A44B19/00 A44B19/04 A44B19/12 A44B19/34 A44B19/40 B01D3/00 B01D3/02 B08B3/08 B08B3/14 C23C14/20 C23C14/34 C23C14/40 C23C14/42 C23C14/54 C23C14/56 F27D1/00 F27D1/14 F27D1/16 H01J37/34 (Advanced/Invention);
F27D1/14 (Advanced/Non-invention);
A44B19/00 A44B19/02 A44B19/10 A44B19/24 B01D3/00 B08B3/08 B08B3/14 C23C14/20 C23C14/34 C23C14/36 C23C14/42 C23C14/54 C23C14/56 F27D1/00 F27D1/14 F27D1/16 H01J37/32 (Core/Invention);
A44B (Subclass/Invention)

International class (IPC 1-7): A44B19/00 A44B19/04 A44B19/10 A44B19/12 A44B19/40 A44B19/42 B01D3/02 B05B13/00 B05B5/02 B05B5/08 B05C B08B3/08 C08J7/04 C23C13/00 C23C14/34 C23C14/40 C23C14/56 C23C15/00 C23C4/14 C23F F27D1/00 F27D1/10 F27D1/14 F27D1/16 G03C1/00 G03C1/74 G03G5/00 G03G5/05 G03G5/10 H01J37/34 H05H1/00

CPC: C23C14/3464 C23C14/541 C23C14/562 H01J37/3277 H01J37/34 C23C14/34 H01J37/3402 H01J37/3438 F27D1/002 Y10T24/2518 Y10T24/2557 A44B19/12 A44B19/406

European class: 48B34P2D2 A44B19/12 A44B19/40C C23C14/34 C23C14/34F C23C14/54B C23C14/56B F27D1/00A1B2 H01J37/32O16D2B H01J37/34 H01J37/34M H01J37/34O6

US class: 110/336 110/341 118/718 204/192 204/192.12 204/192.13 204/192.14 204/192.15 204/192.25 204/192.26 204/29.8 204/298 204/298.08 204/298.09 204/298.12 204/298.16 204/298.24 24/205.16C 24/391 24/413 266/286 266/43 432/236 52/379 52/506.02

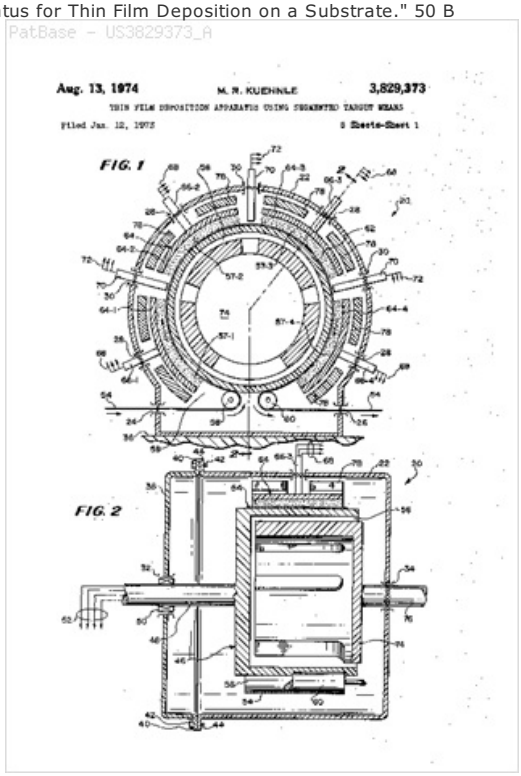
Classification Explorer

Cited documents: US3905887 A, US3855612 A, US3829373 A, US3818982 A, US3710429 A, US3700489 A, US3669871 A, US3654110 A, US3650737 A, US3649502 A, US3630872 A, US3600122 A, US3598639 A, US3528902 A, US3523395 A, US3502562 A, US3488617 A, US3477902 A, US3343207 A, US3336640 A, US3330752 A, US3328857 A, US3314873 A, US3284892 A, US3282816 A, US3272175 A, US3179482 A, US3176433 A, US3077058 A, US3068510 A, US2989026 A, US2925062 A, US2609588 A, US2581989 A, US2270297 A, US2249710 A, US2074874 A, US1972508 A, US1859572 A, US1535220 A, JP51027246 U1, JP45007844 B4, JP45002551 Y1, GB789345 A, GB367074 A, FR707671 A, DE2400510 A1, DE2115590 A1, DE1960641 A1, DE1515322 A1,

Forward Citations: WO9831041, WO9214860, WO9120091, WO8910430, WO8907664, WO8304063, WO14120295, WO14120295, WO14062999, WO14062998, WO10076421, WO10076421, WO05118908, WO05118908, WO05006350, WO05006350, WO02099847, WO02099847, USRE32732, US9869782, US9777376, US9590207, US9550202, US9306192, US9297077, US8900365, US8893402, US8821638, US8685166, US8440020, US8353257, US8182662, US8070917, US7998309, US7972486, US7806981, US7736438, US7705350, US7601246, US7298091, US7169232, US7074744, US6977359, US6943614, US6906008, US6878242, US6669824, US6495010, US6401632, US6399411, US6383565, US6217716, US6210541, US6143149, US6066826, US6024843, US5972160, US5926933, US5799597, US5798027, US5731271, US5725706, US5699745, US5618388, US5599585, US5511356, US5483548, US5460853, US5353567, US5335897, US5314539, US5308046, US5300189, US5296091, US5269899, US5262032, US5234660, US5225057, US5219668, US5209038, US5176876, US5057199, US5013419, US5009765, US4960498, US4885890, US4879017, US4851095, US4850171, US4849087, US4803822, US4783377, US4763458, US4747928, US4693803, US4692233, US4691940, US4673480, US4647022, US4620309, US4607427, US4591707, US4584814, US4560462, US4550578, US4542711, US4505798, US4494295, US4491509, US4478701, US4478022, US4457825, US4455039, US4436602, US4434037, US4429504, US4428809, US4414786, US4413811, US4389295, US4381634, US4379382, US4362611, US4346252, US4343881, US4341916, US4336086, US4331526, US4324602, US4305801, US4300882, US4290877, US4290176, US4287839, US4246852, US4222338, US4222337, US4202148, US4177616, US4177036, US4166018, US4156792, US4151064, US4151059, US4137142, US4120641, US4103469, US4101390, US4088825, US4083155, US4062319, US4026787, US3939052, US3904503, US3901784, US2015376785, US2014311410, US2014291626, US2014130734, US2014110247, US2013305559, US2013064977,

US2011210137, US2011189815, US2011139072, US2010243428, US2010171068, US2010107979, US2009194505, US2009159429, US2009151296, US2009145747, US2009107395, US2009025640, US2009020417, US2008067273, US2006275548, US2006226004, US2006153985, US2006150908, US2005274319, US2005271796, US2005208204, US2005011747, US2004206620, US2004144770, US2003172873, US2003146803, US2003068559, US2003064292, TWI510663, TWI383436, TWI301513, JP59076571, JP57177502, JP57027286, JP55100980, JP52052133, JP5156436, JP4981763, JP3420594, JP2015524022, JP2009108403, GB2337272, GB2337272, GB2268192, GB2268192, GB2265635, GB2265635, GB2150600, GB2119817, FR2548589, FR2527233, FR2522801, FR2497792, FR2413479, FR2413478, FR2387429, FR2387429, FR2335615, EP3006596, EP2118940, EP2113585, EP2055802, EP1713110, EP0785569, EP0785569, EP0660427, EP0574020, EP0534047, EP0516436, EP0328257, EP0269144, EP0157991, EP0134559, EP0134559, EP0134559, EP0131513, EP0002832, DE3533982, DE3248590, DE3207251, DE3129997, DE3021261, DE2856364, DE2856309, DE2815796, DE2647149, DE10202311, DE10202311, DE102005058869, CN103805957, AU575056,

Abstract:
Source: US3829373A ABSTRACT OF THE DISCLOSURE
Apparatus for coating a thin film upon substrate means in a pressure vessel using the plasma vapor deposition technique known as sputtering. The substrate means are arranged on the exterior of a cylindrical drum for rotation 15 and have the convex surface thereof exposed to the plasma vapor during rotation. An assembly of a plurality of circumferentially spaced arcuate target segments forming generally a cylinder is arranged coaxially and telescopi-cally with respect to the drum whereby to form an annular 20 belt of plasma vapor cloud segments occupying the gap exterior of the drum between the target means and the drum. Thhe target means comprise the cathode of the high voltage electrical circuit and the drum comprises the anode. The projecting **unit** target area is larger than the **unit** exposed substrate area enabling radially converging plasma vapor and hence high rates of uniform coating. The drum may rotate the substrate means in the belt repeatedly or serve as transport means to bring the sub- 30 strate means through the belt on one pass. The cylindrical belt is not closed but has a discontinuance which is somewhat greater than the distance between target segments. The substrate means are led onto the drum from the exterior of the assembly of target segments and likewise 35 led off the drum and conveyed to the exterior of the assembly of target segments by way of such discontinuance. CROSS-REFERENCE TO RELATED APPLICATIONS Reference will be made herein to two copending patent applications filed by the applicant and assigned to the assignee of this application. The first copending application is Ser. No. 260,848, 45 filed June 8, 1972 and entitled "Electrophotographic Film." The second copending application is Ser. No. 323,133, filed on Jan. 12, 1973, and entitled "Method and Apparatus for Thin Film Deposition on a Substrate." 50 B



450) Family number: 1091761 (US3832828A)

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Title: EVACUATION AND VENTING SYSTEM FOR VACUUM **PACKAGES** AND VACUUM CHAMBER THEREFOR

Priority: US19730327685 19730129

Family:

Publication number	Publication date	Application number	Application date
CH572840 A	19760227	CH19730016584	19731126
DE2357173 A1	19740801	DE19732357173	19731115
GB1433188 A	19760422	GB19730048844	19731019
JP1078132 C3	19811225	JP19740012116	19740129
JP49104789 A2	19741003	JP19740012116	19740129
JP55013969 B4	19800412	JP19740012116	19740129
US3832828 A	19740903	US19730327685	19730129

Probable Assignee: STANDARD PACKAGING CORP

Assignee(s):(std)**:** STANDARD PACKAGING CORP

Assignee(s): STANDARD PACKAGING CORP NEW YORK N Y V ST A ; STANDARD PACKAGING CORP US

Inventor(s):(std)**:** MARTIN L ; MARTIN LOUIS F

Inventor(s): MARTIN LOUIS F WOODRIDGE N J V ST A ; MARTIN L US

International class (IPC 8-9): B65B31/02 B65B9/04 (Advanced/Invention); B65B31/02 B65B9/00 (Core/Invention)

International class (IPC 1-7): B65B11/52 B65B31/02 B65B7/28

CPC: B65B31/021

European class: B65B31/02C

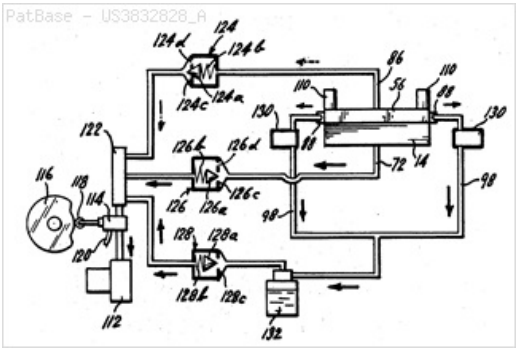
US class: 53/511

Classification Explorer

Cited documents: US3750362 A, US3706174 A, US3509686 A, US3343332 A,

Forward Citations: WO14188397, US7272918, US7204258, US6748726, US5155969, US5048268, US4896479, US4831811, US4777782, US4296588, US4294056, US4009552, US2008190073, US2007186517, JP51131783, ITBO20130255, GB2235678, EP0533134, DE2843894, DE102007034665, DE10155757,

Abstract:
Source: US3832828A An evacuation and venting system and method for providing vacuum **packages** utilizing a vacuum chamber having two vacuum channels or ports, located at the side of the vacuum chamber, and a vacuum channel or port, located at the top of the chamber. The side vacuum channels are arranged to provide efficient evacuation of a **package** disposed in the vacuum chamber to allow the space between the bottom of the **package** and the top of the **package** to be evacuated without adversely affecting the **sealing** bars of the vacuum chamber. The vacuum chamber may be used to vacuum pack liquid-packed foodstuffs by having the top vacuum channel vent or otherwise remove the liquid from the side vacuum channels subsequent to evacuation.



451) Family number: 1055951 (US3918233A)

© PatBase

Title: CONSTRUCTION SYSTEM

Priority: US19730336364 19730227 US19740439059 19740204 US19740439060 19740204 US19750624587 19751022

Family:

Publication number	Publication date	Application number	Application date
AR206311 A1	19760715	AR19740252514	19740101
AT134974 A	19770315	AT19740001349	19740219
AU197465980 A1	19750828	AU19740065980	19740225
BE811313 A	19740820	BE19740141162	19740220
BR7401395 A0	19741105	BR19740001395	19740227
CA1015126 A1	19770809	CA19740192077	19740208
DE2407980 A1	19740905	DE19742407980	19740215
ES423483 A1	19761016	ES19740423483	19740221
FR2219286 A1	19740920	FR19740006441	19740226
GB1465977 A	19770302	GB19740008924	19740227
IL44253 A0	19740516	IL19740044253	19740221
IL44253 A1	19761130	IL19740044253	19740221
IT1003587 A	19760610	IT19740048711	19740225
JP49135422 A2	19741226	JP19740022416	19740227
NL7402275 A	19740829	NL19740002275	19740219
US3918233 A	19751111	US19740439059	19740204
US4026085 A	19770531	US19740439060	19740204
US4077171 A	19780307	US19750625882	19751028
US4078351 A	19780314	US19730336364	19730227
US4112632 A	19780912	US19750625883	19751028
US4403980 A	19830913	US19750624587	19751022

Probable Assignee: STAR MFG CO

Assignee(s):(std)**:** STAR MFG CO ; SIMPSON HAROLD GRAVES ; STAR MANUFACTURIN CO OF O ; STAR MFG CY OKLAHOMA ; STAR MANUFACTURING CY OKLAHOMA ; STAR MANUFACTURIN COMPANY OF O ; STAR MFCT CO

Assignee(s): STAR MANUFACTURIN COMPANY OF OKLAHOMA ; SIMPSON HAROLD G ; ROBERTSON CECO A DE CORP CORP ; STAR MANUFACTURIN CO OF OKLAHOMA ; STAR MANUFACTURING CO OF OKLAHOMA ; STAR MANUFACTURING COMPANY ; STAR MANUFACTURING COMPANY OF OKLAHOMA ; STAR MFG CO OF OKLAHOMA ; WELLS FARGO BANK NA ; ROBERTSON CECO CORP ; WELLS FARGO BANK NA A NATIONAL BANKING ASSOCIATION ; H H ROBERTSON TWO GATEWAY CENTER PITTSBURGH PENNSY ; STAR MANUFACTURING CY OKLAHOMA US ; EQUITABLE BANK NATIONAL ASSOCIATION AGENT AS ; EQUITABLE BANK NATIONAL ASSOCIATION AS AGENT ; FIRST CITY SECURITIES INC ; H H ROBERTSON A CORP ; H H ROBERTSON CO ; H H ROBERTSON A CORP OF DELAWARE ; H H ROBERTSON CO A CORP OF PA

Inventor(s):(std)**:** SALISBURY CLARENCE S ; SIMPSON HAROLD G ; SIMPSON HAROLD GRAVES ; SIMPSON H ; ROBERTS MICHAEL L

Inventor(s): GRAVES SIMPSON HAROLD ; HAROLD GRAVES SIMPSON

Agent(s): AE MULFORD

International class (IPC 8-9): E04B7/10 E04D13/00 E04D13/14 E04D13/15 E04D3/35 E04D3/36 E04D3/363 E04D3/38
E04F13/07 (Advanced/Invention);
E04D13/04 (Advanced/Non-invention);
E04B7/10 E04D13/00 E04D13/14 E04D13/15 E04D3/00 E04D3/35 E04D3/36 E04F13/07 (Core/Invention);
E04D13/04 (Core/Non-invention)

International class (IPC 1-7): E04B1/32 E04B1/342 E04B1/60 E04B1/68 E04B2/50 E04B5/00 E04B7/00 E04B7/10 E04C2/00 E04C2/02 E04C2/04 E04C2/30 E04C2/34 E04C2/36 E04C2/38 E04D1/08 E04D1/28 E04D1/36 E04D13/00 E04D13/06 E04D3/35 E04D3/36 E04D3/362 E04D3/38 E04D5/14 E04G21/14

CPC: E04D13/1407 E04D13/151 E04D2013/0436 Y10S52/04 E04D3/358 E04B7/105 E04D3/352 E04D3/3601 E04D3/363 E04D3/38

European class: E04B7/10C E04D13/14A E04D13/15D E04D3/35 E04D3/35A1 E04D3/35F E04D3/363 E04D3/36A E04D3/38

US class: 52/11 52/16 52/219 52/302.6 52/309.11 52/462 52/483 52/483.1 52/536 52/591.3 52/592 52/60 52/62 52/745.07 52/747 52/81.3 52/96 52/DIG.4 525/36 527/47

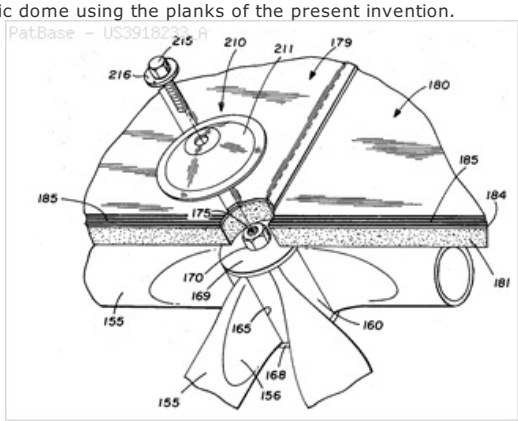
Classification Explorer

Cited documents: US985140 A, US915205 A, US871179 A, US554287 A, US518464 A, US438323 A, US3790993 A, US3785101 A, US3750523 A, US3694983 A, US3672951 A, US3671371 A, US3627600 A, US3566738 A, US3557507 A, US3545147 A, US3483664 A, US3468086 A, US3455076 A, US3394506 A, US3381436 A, US3373537 A, US3367076 A, US330916 A, US3280528 A, US3254459 A, US3192669 A, US3181300 A, US3129531 A, US3111787 A, US3088495 A, US3070864 A, US3049201 A, US3002590 A, US2950788 A, US2914936 A, US2874652 A, US2756172 A, US2234621 A, US2209816 A, US2207897 A, US2205275 A, US1255231 A, GB1172363 A,

Forward Citations: WO9967479, WO8801668, WO8300892, WO8103195, WO04053252, WO03046306, US9868268, US9797147, US9670678, US9322176, US9121184, US9027715, US8991555, US8959853, US8910384, US8863475, US8752340, US8518308, US8499505, US8413386, US8407958, US8220208, US8156700, US8146324, US8029258, US8006441, US7988384, US7980040, US7810537, US7803239, US7765743, US7640711, US7614152, US7573560, US7520103, US7415801, US7406801, US7387149, US7318282, US7303358, US7301606, US7021012, US6957931, US6944997, US6892782, US6892499, US6884002, US6840013, US6830269, US6813864, US6754993, US6751923, US6691473, US6620271, US6616781, US6588801, US6442904, US6110311, US6021616, US5983592, US5960596, US5918438, US5850719, US5845440, US5775052, US5615526, US5323573, US5289664, US5031374, US5025522, US5007220, US4966819, US4941300, US4849268, US4796389, US4750807, US4744187, US4741132, US4715160, US4711063, US4619100, US4603517, US4571909, US4548002, US4520606, US4467581, US4455804, US4338753, US4330969, US4324083, US4322176, US4312326, US4296582, US4295312, US4184294, US4162597, US4094110, US3994106, US2017173920, US2017037614, US2017009468, US2017005611, US2016047129, US2014041327, US2012080267, US2012031712, US2011078965, US2010318222, US2010290014, US2010179678, US2010088982, US2010008732, US2009308423, US2009109419, US2009107053, US2009043424, US2009032165, US2008196352, US2008085336, US2008016806, US2007261346, US2007222966, US2006288651, US2006185303, US2006137270, US2005284058, US2005210774, US2005097830, US2005094125, US2005028470, US2005013672, US2005011155,

US2004226247, US2004111998, US2004045227, US2002124485, NL1015075, JP9096041, JP3277311, ITBS20110008, GB2303651, GB2303651, GB2293183, FR2731025, FR2590375, EP1375770, EP1279776, EP1279776, EP1279776, EP1149959, EP0796960, EP0228931, EP0104810, EP0015766, DE2558108, DE202008005695, AU783959, AU783959, AU2003288482,

Abstract:
Source: US3918233A A construction system is disclosed utilizing a prefabricated plank which can be assembled in contiguous, aligned relationship with other similar planks to form a construction section. The individual planks are of varying geometric shapes and are of a composite construction having a structural core with a flexible membrane **covering**. The core may be formed from foamed plastic, concrete or the like and the membrane a flexible plastic or light gauge metal. The membrane **covering** includes an edge flap portion adapted to overlie the marginal edge of the next adjacent plank to provide a continuous weatherproof **seal** between planks. The flaps are **sealable** by flexible fasteners carried on the membrane flap and marginal portion in the form of interlocking rib and groove elements. The groove and ribs may take various shapes such as a barb and socket and may also include provision for a marginal expansion joint to facilitate assembly of the membrane **covering** and eliminate expansion and contraction problems caused by temperature changes. In the corner area between adjacent planks, a compressive fastener **seals** between the converging edge **seals** to effect a weatherproof exterior. Another form of the edge **seal** is heat and pressure bended to weatherproof the system. The interlocking flexible structure is also adaptable to **seal** overlapping corrugated metal building panels. The individual planks can be assembled to form a roof, wall or any construction section. The present invention also discloses the construction of a geodesic dome using the planks of the present invention.



452) Family number: 30771087 (US3933297A)

Title: Packing **container**

Priority: CH19730002411 19730220 DK19740000886 19740219 DK19760000047 19760107

Family:

Publication number	Publication date	Application number	Application date
AU197465741 A1	19750821	AU19740065741	19740219
BR7401253 A0	19741105	BR19740001253	19740220
BR7401264 A0	19741105	BR19740001264	19740220
CA1005377 A1	19770215	CA19740193062	19740220
CH562133 A	19750530	CH19730002411	19730220
DE2407346 A1	19740905	DE19742407346	19740215
DE2407346 B2	19790628	DE19742407346	19740215
DK136414 B	19771010	DK19740000886	19740219
DK136414 C	19780306	DK19740000886	19740219
DK138484 B	19780918	DK19760000047	19760107
DK138484 C	19790226	DK19760000047	19760107
DK4776 A	19760107	DK19760000047	19760107
FR2218252 A1	19761126	FR19740005666	19740220
FR2218252 B3	19761126	FR19740005666	19740220
GB1456081 A	19761117	GB19740006170	19740211
IT1008280 A	19761110	IT19740048587	19740220
JP1189367 C3	19840213	JP19740020348	19740220
JP50041694 A2	19750416	JP19740020348	19740220
JP58022436 B4	19830509	JP19740020348	19740220
NL7402341 A	19740822	NL19740002341	19740220
NO143871 B	00000000	NO19740000530	19740218
NO143871 C	19810429	NO19740000530	19740218
SE418950 B	19810606	SE19740002083	19740218
SE418950 C	19811015	SE19740002083	19740218
SU557746 D	19770505	SU19742001674	19740219
SU557746 T	19770505	SU19742001674	19740219
US3933297 A	19760120	US19740441219	19740211
ZA7401105 A	19750129	ZA19740001105	19740220

Probable Assignee: TETRA PAK AB

Assignee(s):(std)**:** TETRA RAK DEV SA ; TETRA PAK INT ; TETRA PAK DEV

Assignee(s): TETRA PAK DEV SA ; CARLSSON LARS ; LARSSON GORAN ; PALSSON JAN ; RAUSING HANS ; TETRA PAK AB ; TETRA PAK DEVELOPPEMENT S A ; TETRA PAK DEVELOPPEMENT SA ; TETRA PAK DEVELOPPEMENT SA CH ; TETRA PAK DEVELOPMENT AB ; TETRA PAK INTERNATIONAL AB ; TETRA PAK INTERNATIONAL AB LUND SCHWEDEN ; TETRA PAK INT AB

Inventor(s):(std)**:** CARLSSON LARS ; CARLSSON LARS C ; LARSSON GORAN ; LARSSON GORAN K ; OLSEN J ; LARSSON GOERAN ; PAALSSON JAN ; RAUSER J ; RAUSING H ; RAUSING HANS ; RAUSING HANS A ; PALSSON JAN ; PALSSON JAN F

Inventor(s): RARUSU KARURUSON ; CARLSSON L ; YAN PARUSON ; PALSSON J ; LARSSON GOERAN DALBY ; PAALSSON J ; CARLSSON LARS STAFFANSTORP ; G LARSSON ; GOERAN LARSSON ; GOORAN RARUSON ; GORAN LARSSON ; H RAUSING ; HANS RAUSING ; HANSU RAUJINGU ; J PALSSON ; JAN PAALSSON ; JAN PALSSON ; L CARLSSON ; LABS CARLSSON GITEAU LARSSON JAN PA LSSON AND HANS RAUSING ; LARS CARLSSON ; LARSSON G

International class (IPC 8-9): B65D1/28 B65D25/34 B65D5/12 B65D5/44 B65D5/54 B65D5/56 B65D5/70 B65D6/32 B65D77/02 B65D77/20 B65D77/30 B65D85/72 (Advanced/Invention);
B65D5/44 B65D5/54 B65D5/56 (Advanced/Non-invention);
B65D1/22 B65D25/00 B65D5/02 B65D5/44 B65D5/54 B65D5/56 B65D6/00 B65D77/00 B65D77/10 B65D77/22 B65D85/72 (Core/Invention)

International class (IPC 1-7): B65B61/18 B65D1/28 B65D15/02 B65D15/22 B65D15/24 B65D17/14 B65D17/16 B65D17/20 B65D17/24 B65D17/34 B65D25/14 B65D3/10 B65D5/12 B65D5/14 B65D5/22 B65D5/28 B65D5/40 B65D5/54 B65D5/56 B65D5/70 B65D6/32 B65D65/26 B65D75/58 B65D77/20 B65D77/30 B65D77/32 B65D85/72

CPC: B65D5/12 B65D5/5405 B65D5/563 B65D77/2056 B65D2577/2091

European class: B65D5/12 B65D5/54B B65D5/56B B65D77/20E1B3B2 L65D577/20P2

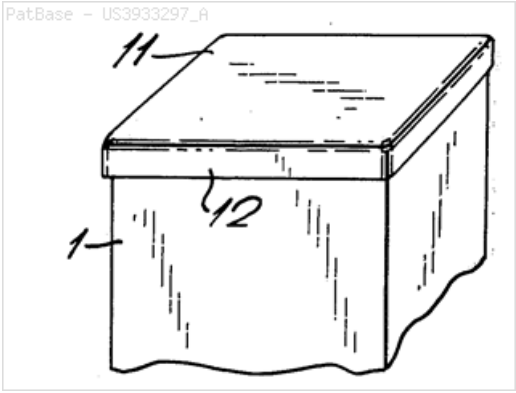
US class: 229/122.22 229/123.2 229/123.3 229/125.17 229/125.19 229/125.35 229/207 229/235 229/239 229/3.1 229/5.84

Classification Explorer

Cited documents: US3406891 A, US3064874 A, US2784901 A, US2437114 A, US2378972 A, US2140177 A,

Forward Citations: WO9513219, WO9513219, WO8603174, WO05082729, USD501397, USD494861, USD491801, USD489974, USD481942, USD481630, USD480965, USD473464, USD464566, USD451022, USD451019, US9439490, US7954640, US7753255, US6955289, US6761279, US5938107, US5156330, US5145065, US5125886, US4909434, US4819863, US4700883, US4473168, US4300716, US4084489, US2013167857, US2010279040, US2010276476, US2007228128, US2007151886, US2005236465, US2005173507, US2003166368, JP58017841, JP57079614, JP56041140, JP56024671, JP55090579, JP55018466, JP54134128, JP54005546, JP5077827, JP3320761, FR2992298, FR2665143, FR2503036, FR2456044, EP0499086, EP0408831, DE2911737,

Abstract:
Source: US3933297A The invention, relating to cylindrical or prismatic, disposable **containers** for liquids, which **containers** have top and bottom end **closures**, comprises forming an end **closure** from a disk which is fixed to an end **opening** region of the **container** body by fusing together the common contact surfaces of the disk and said region or by means of a heat-activatable bonding agent.


PatBase - US3933297_A
11
12
1

453) Family number: 1094542 (US3836159A)

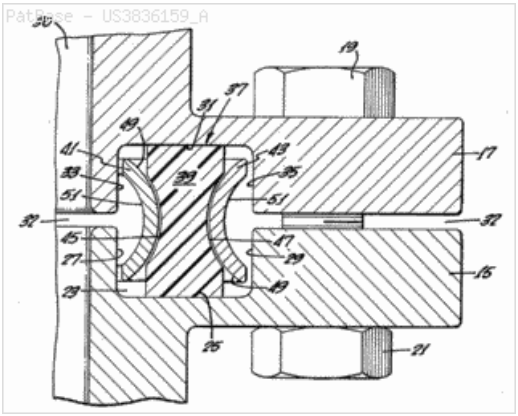
Title:	CAPTIVE PLASTIC **SEAL**
Priority:	US19720287045 19720907 US19740480051 19740617 US19740528448 19741129

Family:

Publication number	Publication date	Application number	Application date
US3836159 A	19740917	US19720287045	19720907
US3918725 A	19751111	US19740480051	19740617
US4050624 A	19770927	US19740528448	19741129

Probable Assignee:	SHAMBAN AND CO W S
Assignee(s):(std)**:**	SHAMBAN AND CO W S ; WILLIAMS DONALD F
Assignee(s):	WILLIAMS DONALD F TRUSTEE OF WILLIAMS FAMILY TRUST DATED OCTOBER 4 1988 AS ; SHAMBAN W AND CO US ; W S SHAMBAN AND CO
Inventor(s):(std)**:**	DRYER E ; DRYER ELDON O ; WILLIAMS DONALD F
Inventor(s):	DRYER E US
International class (IPC 8-9):	B65D85/10 F16J15/02 F16L23/18 (Advanced/Invention); B65D85/08 F16J15/02 F16L23/00 (Core/Invention)
International class (IPC 1-7):	B65D5/22 B65D5/66 F16J15/12
CPC:	F16J15/022 F16L23/18 B65D85/1063 Y10S229/90
European class:	B65D85/10G6 F16J15/02B2 F16L23/18
US class:	229/146 229/165 229/33 229/900 277/167.5 277/180 277/612 277/614 285/336 285/363
Classification Explorer	
Cited documents:	US3481613 A, US3355181 A, US2964228 A, US2764311 A, US2527167 A, US1420001 A, FR1477551 A,
Forward Citations:	WO9423233, USD589363, USD515415, US9861215, US9738108, US9545162, US9174483, US8966796, US8959812, US8764021, US8668258, US8622398, US8349516, US8328203, US8235396, US8186691, US7942422, US7740248, US7350833, US6598406, US6419237, US6408631, US6070912, US5863078, US5624124, US5558344, US5358262, US5253875, US5076591, US4950000, US4930791, US4850521, US4762272, US4441725, US4418923, US4228946, US4144996, US4003590, US2015159791, US2014175759, US2013134707, US2013055609, US2013043677, US2012297653, US2012187726, US2010320695, US2010171301, US2010167173, US2009322039, US2008029966, US2007222159, US2005200128, US2005062235, KR101471772, JP58149492, EP0241347, EP0043590, CN104728445, CN103062403,

Abstract:
Source: US3836159A A **seal** comprising a **sealing** ring of deformable **sealing** material having inner and outer peripheral surfaces and inner and outer retainer rings. Each of the retainer rings is concave in axial cross section and is resiliently deformable in the radial direction.



454) Family number: 1327889 (US3838796A)

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Title: FLUID AND PASTE **DISPENSER**

Priority: US19720308548 19721121 US19730387705 19730813 US19730392089 19730827 US19740518670 19741029 US19730387707 19730813

Family:

Publication number	Publication date	Application number	Application date
US3838796 A	19741001	US19730387705	19730813
US3938706 A	19760217	US19730392089	19730827
US3984034 A	19761005	US19740518670	19741029

Probable Assignee: COHEN M

Assignee(s):(std)**:** COHEN M ; COHEN MILTON J

Assignee(s): COHEN M US

Inventor(s):(std)**:** COHEN M ; COHEN MILTON J

Inventor(s): COHEN M US

International class (IPC 8-9): B65D83/00 B65D83/14 B67D7/02 (Advanced/Invention); B65D83/00 B65D83/14 B67D7/00 (Core/Invention)

International class (IPC 1-7): B65D35/20 B65D35/30 B65D35/56 B65D83/00 B65D83/14 B67D5/54

CPC: B65D83/0077 B65D83/62 B65D83/64 B65D83/0072 B67D7/0216

European class: B65D83/00B3 B65D83/00B6 B65D83/14M1 B65D83/14M2 B67D7/02C

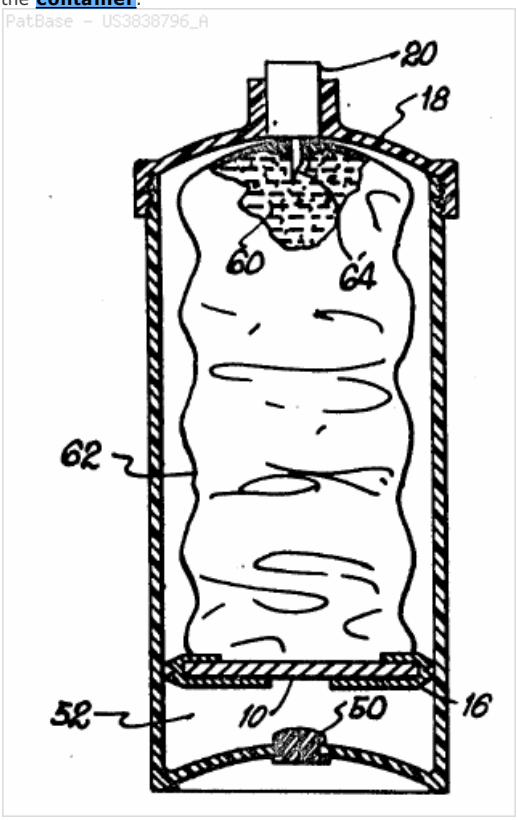
US class: 222/105 222/387 222/389 222/83.5 222/95 401/158 401/176

Classification Explorer

Cited documents: US3731854 A, US3642172 A, US3482738 A, US3471059 A, US3412900 A, US3391829 A, US3223289 A, US3157314 A, US2744658 A, US2477875 A, US2373774 A, US194706 A, US1668511 A, US1303845 A, GB386298 A, FR850458 A, CH204082 A,

Forward Citations: WO9811000, WO9310020, WO8808334, WO8807963, WO8600609, WO8300316, WO8101129, US9737126, US8827582, US6923342, US6874544, US6789702, US6651845, US6250505, US6170715, US5957333, US5921439, US5865350, US5839623, US5516007, US5421485, US5419460, US5366115, US5332122, US5318204, US5259842, US5240141, US5238150, US5186361, US5178300, US5137179, US5056685, US5037009, US5031798, US4971251, US4842165, US4756450, US4750647, US4599625, US4569838, US4565692, US4562066, US4562065, US4529585, US4529584, US4470715, US4456134, US4385714, US4265372, US4067499, US4052986, US2012279995, US2009019766, US2009014473, US2006124671, US2006124663, US2004226964, US2004216802, US2003175376, GB2146076, FR2698852, FR2694921, FR2516482, FR2487789, EP1052188, EP0903302, EP0903302, EP0354650, EP0287015, EP0191616, EP0191616, EP0167482, EP0134147, EP0134147, EP0091306, EP0028032, DE9200521, DE8706659, DE4101994, DE3934237, DE3811468, DE3721099, DE3718948, DE3445977,

Abstract:
Source: US3838796A A **bag**-type fluid and paste **dispenser** in the form of a rigid elongate housing having a **dispensing** valve at one end and having a collapsible **bag** therein containing the fluid or paste material to be **dispensed**, and in which the fluid or paste material within the **bag** is pressurized by a resilient means and means within the **container** releasably immobilizing resilient means in its tensioned state, and a cartridge for filling or refilling the **container**.



455) Family number: 1372002 (US3925963A)

Title: FORM, FILL AND **SEAL** INDUSTRIAL **BAG** MACHINE

Priority: KR19740002079 19740404 US19730347923 19730404 US19750572582 19750428 US19750572594 19750428 US19750572581 19750428 US19740460864 19740415 US19760747746 19761206 US19750572602 19750428

Family:

Publication number	Publication date	Application number	Application date
AR211225 A1	19771115	AR19740253128	19740403
AU197467020 A1	19750925	AU19740067020	19740322
BE813235 A	19741003	BE19740142793	19740403
BR7402641 A0	19741203	BR19740002641	19740403
CA991977 A1	19760629	CA19740196727	19740403
CH572837 A	19760227	CH19740004724	19740404
DD111346 C	19750212	DD19740177619	19740402
DE2415228 A1	19741010	DE19742415228	19740329
DE2415228 C2	19851031	DE19742415228	19740329
ES424910 A1	19761001	ES19740424910	19740403
ES435319 A1	19761216	ES19750435319	19750305
ES435320 A1	19761216	ES19750435320	19750305
FR2224348 A1	19741031	FR19740011759	19740403
FR2224348 B1	19780811	FR19740011759	19740403
GB1471361 A	19770427	GB19740015054	19740404
GB1471362 A	19770427	GB19760032752	19740404
IT1004112 A	19760710	IT19740050059	19740403
JP1071440 C3	19811030	JP19760102499	19760827
JP50053191 A2	19750512	JP19740037758	19740403
JP52049192 A2	19770419	JP19760102499	19760827
JP53003699 B4	19780209	JP19740037758	19740403
JP56012527 B4	19810323	JP19760102499	19760827
JP925619 C3	19780922	JP19740037758	19740403
KR800000211 B1	19800312	KR19740002079	19740404
NL7404530 A	19741008	NL19740004530	19740403
PL95856 B	19771130		00000000
PL95856 P	19771130	PL19740170083	19740404
SE424533 B	19820726	SE19740004451	19740402
SE424533 C	19821104	SE19740004451	19740402
SU606543 D	19780505	SU19742014790	19740403
SU606543 T	19780505	SU19742014790	19740403
US3925963 A	19751216	US19740460864	19740415
US4009551 A	19770301	US19750572582	19750428
US4073121 A	19780214	US19770762682	19770126
US4074504 A	19780221	US19760747742	19761206
US4109792 A	19780829	US19760747746	19761206

Probable Assignee: EAGLE PACKAGING CORP

Assignee(s):(std)**:** DOW CHEMICAL CO ; EDDIE LEE GREENAWALT ; LORENZO DOW GEREN

Assignee(s): THE DOWCHEMICAL COMPANY ; THE DOW CHEMICIAL COMPANY ; PACKAGE MACHINERY CO A CORP OF ; THE DOW CHEMICAL CO MIDLAND MICH V ST A ; THE DOW CHEMICAL CO MIDLAND MICH US ; GEREN LORENZO D ; GREENAWALT EDDIE L ; DOW CHEMICAL CO MIDLAND MICH V ST A ; DOW CHEMICAL CO THE ; EAGLE PACKAGING CORP ; DOW CHEMICAL CY US ; DOW CHEMICAL CY ; DZE DAU KEMIKAL KOMPANI FA ; DOW CHEMICAL COMPANY THE ; DZE DAU KEMIKAL KOMPANI FIRMA ; DOWCHEMICAL CO ; DOW CHEMICIAL CO ; PACKAGE MACHINERY CO ; THE DOW CHEMICAL CO ; THE DOW CHEMICAL COMPANY ; DOW CHEM CO

Inventor(s):(std)**:** GEREN RENZO DOW ; GREENAWAIT E ; GREENAWALT EDDIE L ; GRINAVALT EDDI LI ; RORENZO DAU JIYAAREN ; WALT EDDIE LEE GREENA ; GREENAWALT EDDIE LEE ; GREENAWALT E L ; GREENAWALT E ; GEREN LORENZO DOW ; GEREN L D ; DZHEREN LORENTSO DAU ; EDEI RII GURIINAWARUTO ; GEREN L ; GEREN LORENZO D

Inventor(s): GEREN LORENZO DOW LAKE JACKSON TEX ; EDDIE LEE GREENAWALT ; E L GREENAWALT ; LORENTSO DAU DZHEREN US ; EDDI LI GRINAVALT US ; LORENZO DOW GEREN ; L D GEREN

International class (IPC 8-9): B29C65/00 B65B31/04 B65B41/18 B65B51/10 B65B51/20 B65B51/30 B65B51/32 B65B61/24 B65B9/00 B65B9/06 B65B9/087 B65B9/10 B65B9/20 B65B9/207 C07D233/58 (Advanced/Invention);
B29C35/16 (Advanced/Non-invention);
B29C65/00 B65B31/04 B65B41/00 B65B51/00 B65B51/10 B65B51/20 B65B51/26 B65B61/00 B65B9/06 B65B9/10 C07D233/00 (Core/Invention);
B29C35/00 (Core/Non-invention)

International class (IPC 1-7): B29D B65B1/00 B65B1/02 B65B3/02 B65B3/26 B65B31/00 B65B31/04 B65B39/00 B65B41/14 B65B41/18 B65B51/20 B65B51/26 B65B51/32 B65B57/00 B65B9/00 B65B9/06 B65B9/08 B65B9/10 B65B9/12 B65B9/20 B65D31/00 B65D77/12 C07D233/58 H01L21/52

CPC: B65B9/20 B29C2795/002 B65B41/18 B29C66/949 B29C53/50 B29C65/10 B29C65/745 B29C66/81457 B29C66/8161 B29C66/919 B29C66/929 B29L2031/7128 B29C66/9121 B29C66/9141 B29C66/91641 B29C66/91653 B29C66/91431 B29C66/4322 B29C66/81422 B29C66/81427 B65B51/306 B29C66/0342 B29C66/1122 B29C66/4312 B29C66/83533 B29C66/8491 B65B9/2042 B65B9/2049 B65B9/207 B65B31/04 B65B51/20 B65B51/32 B29C66/005 B29C2035/1658 B29C66/91421 B29C66/9241 Y10T156/1054 B29C66/961 B29C65/7897 B29C66/49 B29C66/73921 B29C66/71 B29C66/3494 B29C66/8181 B29C66/81811 B29K2023/083 B29C66/80 B29C66/8221 B29C66/8242 B29K2023/06 B29K2101/12 B29C66/723

European class: B29C65/10 B29C65/745 B29C65/74E B29C66/005 B29C66/0342 B29C66/1122 B29C66/4312 B29C66/80 B29C66/81457 B29C66/8161 B29C66/83533 B29C66/8491 B29C66/91431 B65B31/04 B65B41/18 B65B51/20 B65B51/30C B65B51/32 B65B9/207 B65B9/20Q B65B9/20S L29C35/16C L29C53/50 L29C66/9121 L29C66/91421 L29C66/919 L29C66/929 L29C66/949 L29C795/00B L29K101/12 L29K23/06 L29K23/08B L29L31/7128

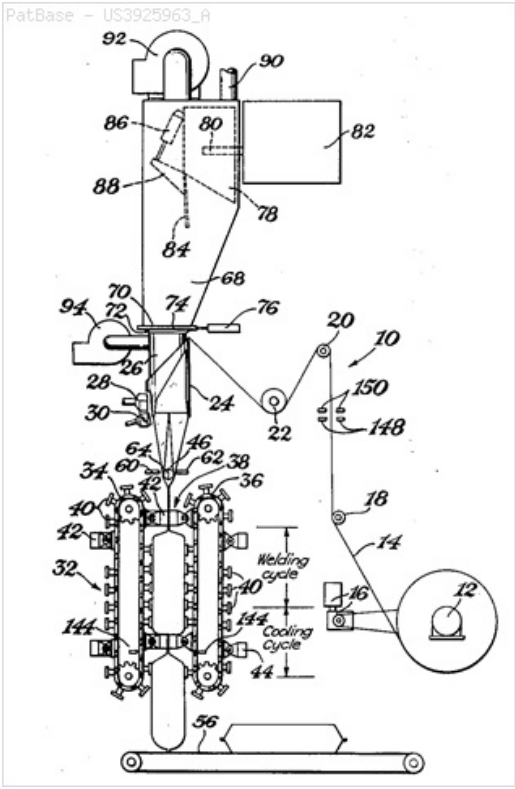
US class: 156/251 156/497 206/525 383/127 53/112A 53/182 53/22A 53/28 53/371.4 53/371.6 53/374.4 53/374.5 53/433 53/450 53/451 53/452 53/477 53/51 53/511 53/551 53/552

Classification Explorer

Cited documents: US3775222 A, US3589095 A, US3559568 A, US3548563 A, US3538676 A, US3529400 A, US3505776 A, US3381441 A, US3195285 A, US3040490 A, US2977730 A, US2837883 A, US2385897 A, JP38017748, DE2257321 A1, DE1869976 U, DE1511628 A1, DE1479840 A1, CH439065 A,

Forward Citations: WO9624522, WO9413537, WO9323288, WO9013485, WO9007452, WO17129848, WO16124560, WO11050354, WO08025175, WO07054523, WO06013171, WO05110856, WO04063014, WO0020279, USRE33467, US9630375, US9598189, US9598188, US9573342, US9339986, US9316441, US9309014, US9284075, US9221229, US9027314, US8833042, US8784967, US8679604, US8656690, US8567165, US8539741, US8522449, US8371094, US8276353, US7900471, US7837388, US7757460, US7640715, US7617658, US7559184, US7441391, US7441390, US7409810, US7308780, US7191575, US6955195, US6951377, US6877295, US6876896, US6581360, US6393809, US6381919, US6358353, US6265002, US6212861, US6145282, US6122894, US6085495, US6079188, US6067778, US6058680, US6038838, US6027820, US6006501, US5862652, US5860270, US5848517, US5800851, US5732532, US5701724, US5619844, US5548947, US5473866, US5440860, US5408791, US5406777, US5400569, US5347792, US5269122, US5182128, US5170609, US5131213, US5112632, US5067307, US5029430, US4996819, US4965985, US4945252, US4926048, US4922650, US4881360, US4829745, US4817366, US4730367, US4671047, US4656813, US4637199, US4608797, US4566250, US4512138, US4501109, US4467207, US4463542, US4450669, US4421499, US4384438, US4350003, US4295322, US4278488, US4081944, US2017355477, US2014090337, US2013045848, US2013040796, US2012233970, US2012180428, US2011192117, US2011154783, US2011138754, US2011131934, US2011094192, US2011088351, US2011085749, US2010276450, US2010197489, US2010181370, US2010170198, US2010154357, US2009297691, US2009293536, US2009293434, US2009158618, US2009013655, US2009004350, US2008295459, US2008289303, US2008041024, US2007220837, US2007095021, US2007011992, US2005236065, US2005235610, US2005178095, US2004226264, US2004017075, KR100790676, KR100786952, JP63016520, JP59175443, JP54040788, JP4445134, JP2016084143, JP2002526344, FR2372728, FR2372728, FR2354926, EP3053835, EP2229568, EP1832518, EP1785355, EP1755960, EP1719705, EP0992431, EP0761536, EP0630811, EP0611694, EP0401422, EP0381400, EP0089648, EP0025235, DE2834392, DE102013207151, DE102013105549, CN102666283, AU716763, AU676922, AU670196, AU670196, AP177,

Abstract:
Source: US3925963A Side gusseted industrial **bags** are continuously (or intermittently) formed from continuous web materials, and simultaneously filled and **sealed** in one fast operation by the method and apparatus of this invention. The various features of the invention include a tube former which wraps the web about a shaped filling mandrel most preferably with the assistance of an air bearing, registration and tension controls to accurately maintain the register of the web in relationship to printed blocks or indicia; evacuation steps to neatly gusset the **bag** with or without mechanical assistance, to tighten the **bag** firmly about the product, and to continuously wash the inside welding surfaces thereof with a cleansing high velocity air stream to thereby retain such surfaces in a more virgin or noncontaminated welding condition; filling steps that are practiced to provide a free margin of material at the top of the **bag** to complement the welding and gusseting steps; and hot gas welding and chilling techniques that can provide tough welds or **seals** with high repeatability, and which are able to withstand the shock or weight of the product load with sufficient immediacy to enable fast production cycles.



456) Family number: 6653037 (US3952912A)

Title: CONTAINER WITH ATTACHED CLOSURE

Priority: US19720231124 19720302 US19740514069 19741011 US19760744162 19761122 US19740515444 19741017 US19760712839 19760809 US19760717993 19760826

Family:

Publication number	Publication date	Application number	Application date
US3843011 A	19741022	US19720231124	19720302
US3952912 A	19760427	US19740514069	19741011
US3977578 A	19760831	US19740515444	19741017
US4051976 A	19771004	US19760712839	19760809
US4062471 A	19771213	US19760717993	19760826
US4084721 A	19780418	US19760744162	19761122

Probable Assignee: CONTINENTAL GROUP

Assignee(s):(std)**:** PERRY DECEASED WALTER MERTON ; PERRY EXECUTRIX BY ELIZABETH D ; PERRY W ; CONTINENTAL GROUP ; PERRY WALTER MERTON

Assignee(s): THE CONTINENTAL GROUP INC ; CONTINENTAL GROUP INC ; PERRY W US

Inventor(s):(std)**:** PERRY DECEASED WALTER MERTON ; PERRY EXECUTRIX BY ELIZABETH D ; PERRY WALTER MERTON ; PERRY W

Inventor(s): PERRY W US

International class (IPC 8-9): B21D51/38 B21D51/44 B65D17/32 B65D17/50 (Advanced/Invention); B21D51/38 B65D17/00 B65D17/28 (Core/Invention)

International class (IPC 1-7): B65D17/00 B65D17/16 B65D17/24 B65D17/32 B65D41/32 B65D43/02 B65D47/10

CPC: B65D17/401 B65D17/4012 B65D17/4014 B65D17/28 B65D17/506 B21D51/383 B65D17/503 B65D2517/0011 B65D2517/0013 B65D2517/0014 B65D2517/0017 B65D2517/002 B65D2517/0062 B65D2517/007 B65D2517/0071 B65D2517/0098 B65D2517/5008 B65D2517/5029 B65D2517/5048 B65D2517/5056 B65D2517/5081 B65D2517/5091

European class: B21D51/38B B65D17/16 B65D17/16B B65D17/16B2 B65D17/16B2B B65D17/50A2 B65D17/50B L65D517/00Y2A L65D517/00Y2B L65D517/00Y2C L65D517/00Y2E L65D517/00Y2Z L65D517/00Y7A1A L65D517/00Y7B1 L65D517/00Y7B2 L65D517/00Y9 L65D517/50M10A1 L65D517/50M2 L65D517/50P1A1 L65D517/50P2 L65D517/50Q1B L65D517/50Q99

US class: 220/260 220/265 220/268 220/269 220/277 220/359.2 220/4.7 220/47 222/541 222/541.9 222/561

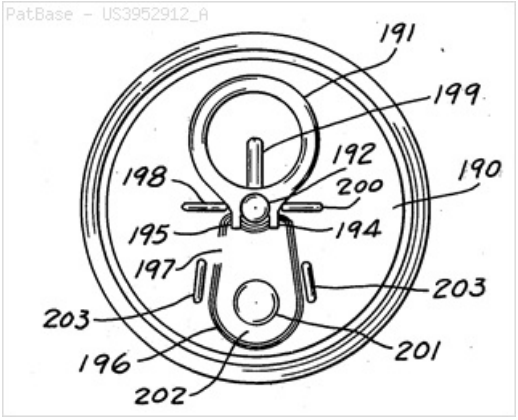
Classification Explorer

Cited documents: US3977561 A, US3967753 A, US3967752 A, US3856184 A, US3843011 A, US3836038 A, US3744667 A, US3744666 A, US3738526 A, US3703979 A, US3446389 A, US2723778 A, US2590437 A, US2320484 A, US2274752 A, US2261117 A, US117510 A,

Forward Citations: WO9714621, WO8907556, WO17097903, WO16132287, WO14003586, WO14003585, WO13018110, WO12112487, WO11117772, WO09051409, WO09051409, WO08104392, WO08051099, WO07147542, WO07056844, WO06010688, WO04113186, WO02070165, WO0183303, WO0146025, WO0105663, WO0105663, WO0069735, WO0056613, WO0037323, USRE42485, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD691039, USD582274, USD582273, USD533452, USD532691, USD532298, USD530610, USD513452, USD509426, USD507485, USD476889, US9901972, US9714115, US9694935, US9592928, US9566634, US9540137, US9446879, US9359108, US9267705, US9233784, US9163653, US9033174, US8998015, US8973780, US8950619, US8875936, US8870012, US8783495, US8733576, US8627979, US8616399, US8567158, US8556104, US8371467, US8328492, US8215513, US8196767, US8104319, US8080770, US8052005, US8011527, US7975884, US7950542, US7812292, US7748563, US7644833, US7594585, US7556168, US7378625, US7350392, US7174762, US7165696, US7112771, US7051896, US7004345, US7000797, US6772900, US6761281, US6748789, US6715629, US6405889, US6354453, US6330954, US6260728, US6244455, US6234336, US6161717, US6129230, US6079583, US6024239, US5967726, US5931331, US5860553, US5806757, US5715964, US5711448, US5692636, US5566850, US5555992, US5402921, US5375729, US5335808, US5219257, US5129541, US5085348, US5065882, US5064087, US5007231, US4901880, US4801038, US4624386, US4585140, US4446985, US4411370, US4387827, US4372462, US4322016, US4184607, US4155480, US4141464, US4078695, US4078694, US4054228, US4030631, US4024981, US4024980, US3997075, US3977578, US3977561, US3972445, US3967753, US3967752, US3967750, US3935961, US2015353229, US2015176622, US2012043325, US2012031056, US2010269345, US2010213194, US2010200590, US2010163560, US2010065568, US2009269169, US2009266824, US2009206083, US2009090716, US2008257900, US2008073343, US2008050207, US2008011786, US2007284368, US2007108208, US2007108198, US2007108197, US2007108196, US2007102425, US2006163253, US2006096994, US2005199619, US2005199617, US2005051552, US2005006388, US2004211786, US2004211780, US2004200838, US2004065663, US2003213803, US2003080132, US2003042258, US2003038134, US2003001788, JP57196640, JP56056734, JP5414074, JP2011500467, JP2003517974, GB2545403, GB2156772, GB2125762, FR2957898, EP2969799, EP2546159, EP1964784, EP0621195, EP0621195, EP0592550, EP0592550, EP0160626, EP0160626, EP0090809, EP0090809, EP0033449, EP0000091, EA027464, EA017452, EA015059, DE2707064, AU761490,

Abstract:
Source: US3952912A Improved easy **opening** means for **containers**. Especially adapted to those used for liquids, including carbonated beverages, and permitting drinking from the **container** or pouring out contents. An important feature is attachment of **closure** to **container** after **opening** to avoid litter. Another feature is lift **tab** for easy **opening**, and with **closure** **sealed** by either a frangible adhesive sealant or by membrane **sealing** means. Lift **tab** initiates rupture of sealant, and then is pushed below **container** top with means to hold **tab** below **opening** so there is no interference when drinking from the can. Another **closure** has a small end for initial pressure release, and then whole **closure** hinges inwardly. Still another means comprises a slide gate with frangible membrane for **sealing** and for very easy **opening**. Optionally a pressure release button is provided to release the internal pressure before pulling the slide gate. An improved forming method for making the **opening** smaller than the **closure** where the **closure** is cut from the ductile metal top material. Partial use of score lines is included. **Container** top may be of ductile metal or of plastic for some of the designs. Primary objectives are the elimination of separate **closure** device that would cause litter, **closure** easier to **open** than heretofore, low cost, and no danger of a piece coming loose inside **container**.

PatBase - US3952912_A



457) Family number: 1104904 (US3845695A)

Title:	METHOD AND APPARATUS FOR MAKING A **BAG** WITH A **SEALED** POURING SPOUT
Priority:	US19710185680 19711001 US19730390192 19730821

Family:

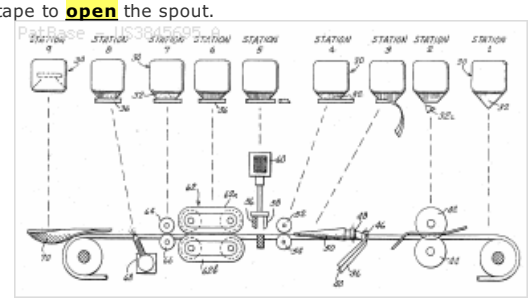
Publication number	Publication date	Application number	Application date
US3845695 A	19741105	US19730390192	19730821

Probable Assignee:	AMSTAR CORP
Assignee(s):(std):	AMSTAR CORP
Assignee(s):	AMSTAR CORP US
Inventor(s):(std):	RANDAZZO A
Inventor(s):	RANDAZZO A US
International class (IPC 8-9):	B65B61/18 (Advanced/Invention); B65B61/18 (Core/Invention)
International class (IPC 1-7):	B31B1/90
CPC:	B65B61/182 B65B61/184
European class:	B65B61/18B B65B61/18C
US class:	493/212 493/213 493/215 493/377

Classification Explorer

Cited documents:	US3322600 A, US3266965 A, US3215335 A, US2613022 A, US2542170 A, US1833675 A,
Forward Citations:	WO9425357, US5370598, US4411644, US2012269467, DE102012104661,

Abstract:
Source: US3845695A A **bag** made of flexible material having a **sealed** pouring spout is disclosed, as well as a method and apparatus for making such a **bag**. The **bag** has **closure** flaps adapted to be folded in overlapping relation and secured together to **seal** an end of the **bag**. The **closure** flaps are typically triangular in shape and composed of a plurality of sheets of material which may be separated to provide a pouring spout. One of the **closure** flaps is severed to provide an **open** end for the pouring spout through which the contents of the **bag** are **dispensed**. A **sealing** tape is secured to the **open** spout end to close it and **seal** the **bag**. The **sealing** tape includes a tear string to aid in tear the tape to **open** the spout.



458) Family number: 1107793 (US3847711A)

Title:	HEAT-**SEALING** SYSTEM FOR PLASTIC **CONTAINERS**
Priority:	US19720225430 19720211 US19740499801 19740822

Family:

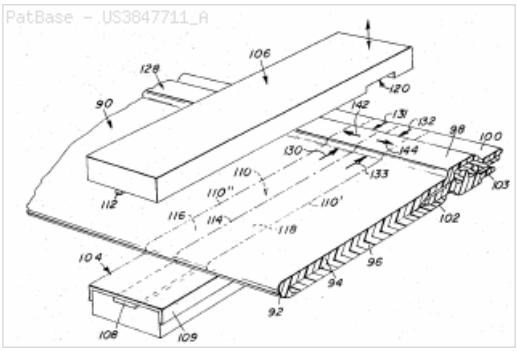
Publication number	Publication date	Application number	Application date
US3847711 A	19741112	US19720225430	19720211
US3986914 A	19761019	US19740499801	19740822

Probable Assignee:	ULY PAK INC
Assignee(s):(std):	ULY PAK INC
Assignee(s):	ULY PAK INC US ; BANK OF NEW ENGLAND NA ; CHARTER BANK
Inventor(s):(std):	HOWARD H ; HOWARD H KEITH
Inventor(s):	HOWARD H US
International class (IPC 8-9):	A44B19/16 B29C65/00 B65D33/25 (Advanced/Invention); A44B19/10 B29C65/00 B65D33/25 (Core/Invention)
International class (IPC 1-7):	B30B15/34 B32B31/04 B32B31/18
CPC:	B65D33/2508 A44B19/16 B29C66/346 B65D33/2541 Y10T156/1313 Y10T156/1054 B29C66/4312 B29C66/8322 B29C65/224 B29C65/7433 B29C65/7453 B29C66/0044 B29C66/8122 B29C66/8124 B29C65/02 B29C65/38 B29C66/71 B29C66/7234 B29C66/72343 B29C66/1122
European class:	B29C66/346 B65D33/25A B65D33/25A3 K44B19/16
US class:	156/228 156/251 156/308.4 156/309.6 156/51.5 156/515 156/581 156/583.2 156/66 264/248 383/37 383/59 383/63 493/209 493/214

Classification Explorer

Cited documents:	US3554822 A, US3506516 A, US3481100 A, US3033257 A,
Forward Citations:	WO11046141, WO04043793, WO04043793, WO03035499, US8506745, US8469591, US8449843, US8245365, US8216529, US8002467, US7750269, US7611283, US7527585, US7367931, US7337507, US7305742, US7214173, US7198749, US6854887, US6846107, US6792740, US6589146, US6588176, US6569368, US6230781, US6131374, US6044621, US6033113, US5988880, US5882472, US5875611, US5868901, US5766396, US5529659, US5511884, US5435864, US5425825, US5273511, US5199795, US5088971, US5085031, US5080225, US5019027, US4976811, US4961805, US4927474, US4856989, US4841603, US4812192, US4807426, US4663915, US4658433, US4601694, US4437293, US4430070, US4344120, US4277241, US4262581, US4135957, US2017066561, US2015024918, US2011235951, US2011186463, US2010205909, US2010068097, US2009257686, US2008173623, US2008159664, US2008044112, US2007199928, US2007092166, US2007086682, US2006201626, US2006196019, US2006137147, US2006111226, US2006093242, US2005063620, US2005008533, US2004204303, US2004120610, US2004091179, US2004037478, US2002088094, EP1765575, EP1765575, EP1676496, EP0505057, EP0505055, EP0368007, CN105151494, AU604465, AU2006306190,

Abstract:
Source: US3847711A A plastic **container** is provided with a plastic bead **seal** at the junction of the interlocking fastener and the side edges of the **container**. The plastic bead **seal** acts as a barrier to the passage of fluids or contaminating bacteria through the fastener at this junction. A method and apparatus are provided for flowing plastic under heat and pressure into and across the junction to form the bead **seal** barrier.



459) Family number: 1147102 (US3889483A)

Title:	HEAT TRANSFER **PACKAGE** WITH SHAPED FRANGIBLE AMPULE
Priority:	US19730355924 19730430

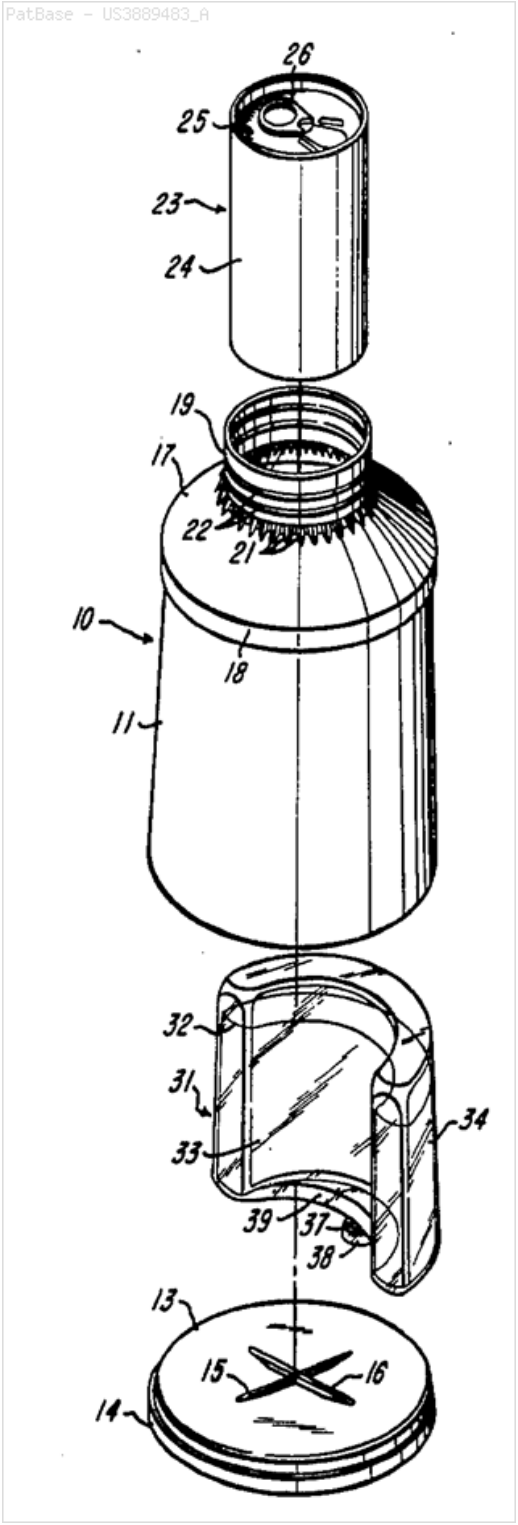
Family:

Publication number	Publication date	Application number	Application date
BR7310131 A0	19741231	BR19730010131	19731226
CA999260 A1	19761102	CA19730178736	19730814
CH578980 A	19760831	CH19730016116	19731116
DE2402142 A1	19741114	DE19742402142	19740117
FR2227502 A1	19741122	FR19730034161	19730924
FR2227502 B3	19760820	FR19730034161	19730924
GB1455019 A	19761110	GB19730051905	19731108
IT997855 A	19751230	IT19730052734	19730925
JP50002233 A2	19750110	JP19730114650	19731012
US3889483 A	19750617	US19730355924	19730430

Probable Assignee:	READI TEMP
Assignee(s):(std)**:**	READI TEMP
Assignee(s):	READI TEMP INC ; READI TEMP INC COLUMBUS OHIO V ST A ; READI TEMP INC US ; STAMPER MAXWELL H ; STAMPER MAXWELL H TRUSTEE JOHN J KLEYNOWSKI ALLEN ; STAMPER MAXWELL H TRUSTEE JOHN J KLEYNOWSKI ALLEN C MATHENA AND GEORGE SHAW AS ; DONNELLY WILLIAM R ; JAMMAL MOTIE
Inventor(s):(std)**:**	DONNELLY W ; DONNELLY WILLIAM R ; DONNELLY WILLIAM REED
Inventor(s):	DONNELLY WILLIAM REED PIQUA OHIO V ST A ; DONNELLY WILLIAM REED PIQUA OHIO VSTA
International class (IPC 8-9):	A47J36/28 B65D81/32 B65D81/34 F24J1/00 F24V30/00 F25D5/00 F25D5/02 (Advanced/Invention); F25D31/00 (Advanced/Non-invention); A47J36/24 B65D81/32 B65D81/34 F24J1/00 F25D5/00 (Core/Invention); F25D31/00 (Core/Non-invention)
International class (IPC 1-7):	A45F3/00 A47J36/28 B65D77/04 B65D81/00 B65D81/32 B65D81/34 F24J1/00 F25D5/00 F28D
CPC:	A47J36/28 B65D81/3484 F24J1/00 F25D5/02 F25D31/007 F25D2331/805 F25D2331/809
European class:	A47J36/28 B65D81/34S F24J1/00 F25D5/02 R25D31/00H2 R25D331/805 R25D331/809
US class:	126/263.07 165/68 62/4
Classification Explorer	
Cited documents:	US3379025 A, US3369369 A, US3091091 A, US3034305 A, US3003324 A, US2968932 A, US2759337 A, US2300793 A,
Forward Citations:	WO9515129, US9879897, US9039924, US6889507, US6338252, US5392762, US5376120, US5263991, US4802343, US4793149, US4773389, US4597917, US2016287012, US2013318916, US2013247591, US2012198860, US2004004829, JP62172384, JP2028063, GB2329461, GB2329461, GB2318181, GB2316159, GB2316159, GB2183017, GB2183017, EP1203189, EP1203189, EP0731674, EP0281342, EP0167989, EP0167989, DE3320243,

Abstract:
Source: US3889483A A heat transfer **unit** in which a receptacle is in containing relation to a substance which may be a food or drink product and is further in containing relation to chemicals in a segregated relation to the product and which when activated have a heating or cooling effect thereon. The product the temperature of which is to be controlled is held in a heat conductive **container** suitably installed to dispose interiorly of the receptacle. An ampule is in the receptacle and when broken disseminates a fluid activating the chemicals to produce the heating or cooling effect. The ampule is a frangible vessel positioning intermediate the **container** and deformable wall and shaped substantially in conformance therewith. An impact or hand applied pressure delivered to the deformable receptacle wall breaks the ampule upon the **container**.

PatBase - US3889483_A



460) Family number: 1162418 (US3973237A)

Title: ARTICLE DEPOSITING MACHINE

Priority: JP19730073031 19730628

Family:

Publication number	Publication date	Application number	Application date
AU197470233 A1	19760108	AU19740070233	19740619
BG25240 A3	19780810	BG19740027111	19740628
BR7405323 A	19760224	BR19740005323	19740627
CA1058755 A1	19790717	CA19740203581	19740627
DE2430344 A1	19750123	DE19742430344	19740625
DE2430344 B2	19810604	DE19742430344	19740625
DE2430344 C3	19820304	DE19742430344	19740625
ES427569 A1	19761116	ES19740427569	19740622
FR2235437 A1	19750124	FR19740022065	19740625
FR2235437 B1	19810807	FR19740022065	19740625
GB1471473 A	19770427	GB19740028958	19740628
JP50023151 A2	19750312	JP19730073031	19730628
JP53015792 B4	19780527	JP19730073031	19730628
JP936691 C3	19781226	JP19730073031	19730628
SE404442 B	19781002	SE19740008473	19740627
SE404442 C	19790111	SE19740008473	19740627
SE7408473 A	19741230	SE19740008473	19740627
SE7408473 L	19741230	SE19740008473	19740627
US3973237 A	19760803	US19740479518	19740614
YU180374 A	19820618	YU19740001803	19740627
YU36823 B	19840831	YU19740001803	19740627

Probable Assignee: FUJITSU LTD

Assignee(s):(std)**:** FUJITSU LTD

Assignee(s): FUJITSU LTD JA ; FUJITSU LTD KAWASAKI KANAGAWA JAPAN ; FUJITSU LTD KAWASAKI KANAGAWA JP ; SUZUKI KOICHI ; OGAWA KATSUMASA ; SAWAGUCHI YOJI ; FUJITSU LIMITED

Inventor(s):(std)**:** KATSUMASA OGAWA ; KOICHI SUZUKI ; OGAWA ; OGAWA K ; OGAWA KATSUMASA ; SAWAGUCHI ; SAWAGUCHI Y ; SAWAGUCHI YOJI ; SUZUKI ; SUZUKI K ; SUZUKI KOICHI ; YOJI SAWAGUCHI

Inventor(s): YOJI SAWAGUCHI KEICHI SUZUKI AND KATSUMASA OGAWA ; K OGAWA ; K SUZUKI ; SUZUKI KOICHI KAWASAKI ; SUZUKI KOICHI KAWASAKI JP ; Y SAWAGUCHI ; SAWAGUCHI YOJI TOKIO ; SAWAGUCHI YOJI TOKYO JP ; OGAWA KATSUMASA YOKOHAMA ; OGAWA KATSUMASA YOKOHAMA JP

International class (IPC 8-9): G06K1/14 G06K7/08 G06Q20/10 G06Q20/18 G06Q40/00 G06Q40/02 G06Q40/04 G07D11/00 G07D9/00 G07F1/06 G07F17/00 G07F7/08 (Advanced/Invention);
G06Q40/00 G07D9/00 G07F17/00 G07F7/08 (Advanced/Non-invention);
G06Q40/00 G07D11/00 G07D9/00 G07F17/00 G07F7/08 (Core/Invention)

International class (IPC 1-7): B65H17/40 B65H35/04 B65H35/06 B65H43/08 B65H9/20 G06C27/00 G06F15/00 G06F15/30 G06F7/06 G06K1/14 G06K19/00 G06K7/08 G07C11/00 G07D1/04 G07F1/06 G07F7/02 G07F7/08 G07F7/10 G07F9/00 G07G1/00 G07G5/00

CPC: G07D11/0096

European class: G07D11/00M4

US class: 194/210 235/379 235/61.7B 902/18 902/9

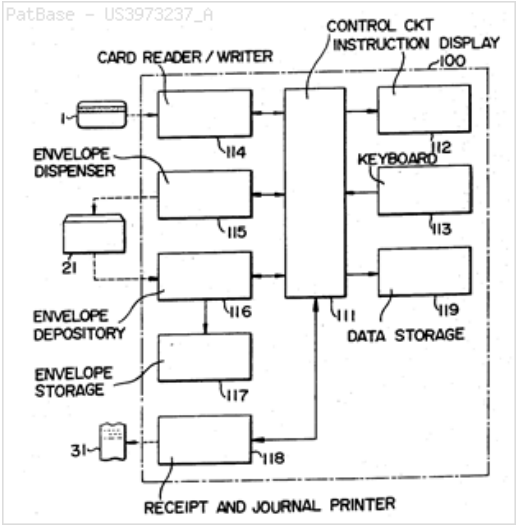
Classification Explorer

Cited documents: US3845277 A, US3778596 A, US3697729 A, US3648020 A, US3104314 A, US3042919 A, US2930296 A, DE2245973 A1, DE2123708 A1,

Forward Citations: WO03038734, WO0025280, US8387771, US8109378, US7954699, US7921979, US7677443, US7347358, US7021529, US6626357, US6543943, US5540425, US5534682, US5493613, US5422467, US4939351, US4652940, US4602149, US4585144, US4540106, US4447714, US4436182, US4317028, US4230938, US4172285, US4038523, US2008308383, US2008135608, US2008121492, US2007012541, US2005086140, US2004206811, JP61029407, JP58004496, GB2120437, FR2619236, FR2537115, FR2508680, FR2469756, EP1138028, EP0081433, EP0081433, EP0038175,

Abstract:
Source: US3973237A An article depositing machine is disclosed which is capable of almost automatically achieving operations for depositing money in a bank or like establishments even in the absence of a bank attendant and which is provided with means for entering a customer's identification number and other necessary information, means for offering to a customer an article **container** for **sealing** therein a bill, a written request for payment or like article, means for entering information on the article **container** offered to the customer, means for storing therein the information on the article **container** together with the customer's identification number and the like, and means for storing therein the article **container** deposited by the customer.

PatBase - US3973237_A



461) Family number: 1116326 (US3858091A)

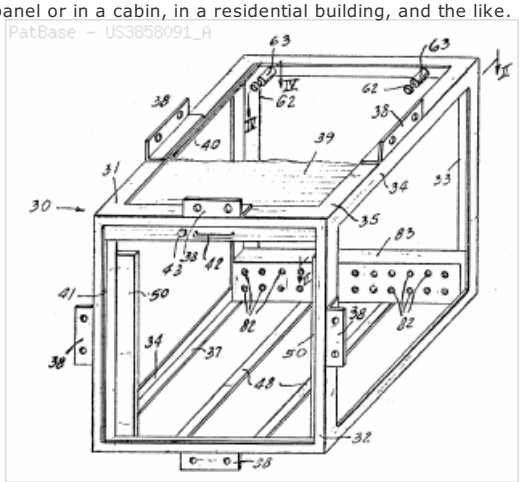
Title:	INTERCHANGEABLE PLUG-IN MODULAR APPLIANCE **UNIT** SYSTEM
Priority:	US19720286772 19720906

Family:

Publication number	Publication date	Application number	Application date
US3858091 A	19741231	US19720286772	19720906

Probable Assignee:	WILKINSON T
Assignee(s):(std):	WILKINSON T
Assignee(s):	WILKINSON T US
Inventor(s):(std):	WILKINSON T
Inventor(s):	WILKINSON T US
International class (IPC 8-9):	H02B1/36 (Advanced/Invention)
International class (IPC 1-7):	H02B1/04 H02B11/00
CPC:	B60K2350/945 H02B1/36 Y02T90/14
European class:	H02B1/36 L60K350/94Q Y02T90/14
US class:	312/297 361/724 361/725 361/731 439/133 439/221
Classification Explorer	
Cited documents:	US3581480 A, US3575482 A, US3500056 A, US3330611 A, US3270253 A, US3110533 A, US3014160 A, US2739730 A,
Forward Citations:	WO9534072, WO8501631, WO08086120, WO08086120, WO04062444, WO04062444, USD722244, US8904736, US8802983, US8789261, US8576548, US8450609, US8283562, US8276325, US8250163, US8154857, US8085543, US8072738, US8040666, US8035958, US8018716, US7980088, US7931114, US7903397, US7898812, US7871300, US7870753, US7869201, US7865639, US7852619, US7843697, US7841907, US7826203, US7810343, US7798865, US7765332, US7751184, US7748494, US7740506, US7740505, US7713090, US7686127, US7651368, US7639485, US7625246, US7618295, US7430110, US7364475, US6466431, US6144555, US5870276, US5825304, US5657200, US5638256, US5627724, US5557186, US5469037, US5412529, US5353216, US5299265, US5245511, US4821143, US4509190, US4481661, US4479263, US4479238, US4004194, US2011241503, US2011155446, US2011155412, US2011154745, US2011025181, US2010248546, US2009016041, US2008287009, US2008247594, US2008247141, US2008232053, US2008231764, US2008222327, US2008203868, US2008202844, US2008192411, US2008168205, US2008165998, US2008165509, US2008165505, US2008165504, US2008164758, US2008164226, US2008043408, US2006134997, US2006049725, EP0767960,

Abstract:
Source: US3858091A A selective appliance is inserted into a chamber provided within a hollow frame having an **opening** through which the appliance is received and with the front of the appliance visually and manually accessible at the frame **opening**. Insertion of the appliance automatically effects releasable selective operating electrical connection. Releasable retaining means hold the appliance in the frame. Mounting of the frame may be at a convenient location in which the appliance or any selected one of a number of appliances may be most useful, such as under the dash of an automobile for access to the automobile driver or a seat companion, in a pleasure boat under a dash panel or in a cabin, in a residential building, and the like.



462) Family number: 1116912 (US3858752A)

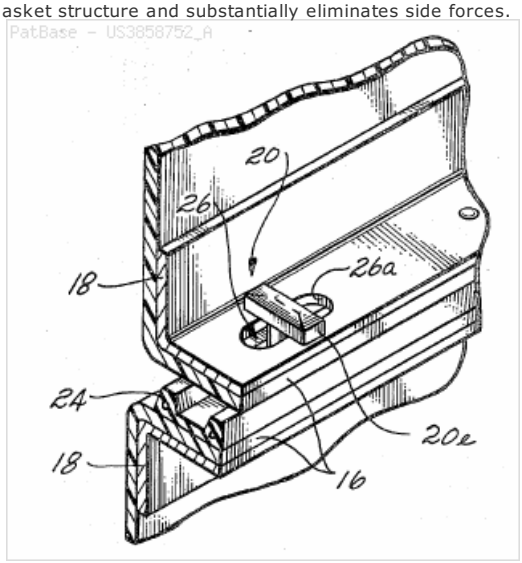
Title:	**CONTAINER** HAVING IMPROVED **RESEALABLE** **CLOSURE** SYSTEM
Priority:	US19740439439 19740204

Family:

Publication number	Publication date	Application number	Application date
US3858752 A	19750107	US19740439439	19740204

Probable Assignee:	PLASTICS RESEARCH CORP
Assignee(s):(std):	PLASTICS RESEARCH CORP
Inventor(s):(std):	MARVIN JR RICHARD T ; RASMUSSEN DONALD O
International class (IPC 8-9):	B65D45/02 B65D53/00 B65D53/02 (Advanced/Invention); B65D45/00 B65D53/00 (Core/Invention)
International class (IPC 1-7):	B65D53/00 B65D7/00 B65D7/24
CPC:	Y10S285/91 B65D11/188 B65D45/02 B65D53/02 Y10T292/1049
European class:	B65D11/18H4 B65D45/02 B65D53/02
US class:	220/325 220/378 220/4.24 220/643 220/681 220/7 285/910 292/218
Classification Explorer	
Cited documents:	US3688941 A, US3666340 A, US3581814 A, US3464579 A, US3113690 A, US3072285 A, US3042248 A, US2939603 A, US2837063 A, US2590803 A, US2330306 A,
Forward Citations:	USD429735, US9494756, US9317069, US9190819, US9161462, US8752842, US8740011, US8286822, US7575828, US7004277, US6896848, US6612620, US6557858, US6486401, US6189717, US6173997, US6145891, US6086117, US5988944, US5971442, US5967567, US5967392, US5961155, US5950860, US5833392, US5261736, US5133124, US5095593, US5074428, US5035185, US4980955, US4917246, US4661326, US4360115, US4144984, US2015156904, US2014263298, US2014138384, US2013113167, US2012325694, US2011018213, US2010171061, US2009250473, US2009057316, US2007062841, US2006028171, US2004026427, KR101480666, JP4331448, JP2003136430, GB2340111, GB2340111, EP2590489, EP0174819,

Abstract:
Source: US3858752A First and second flexible plastic body portions together define a **container** chamber and each comprise at least one side encircling the chamber. A **resealable** **closure** system is provided as follows. A **seal** flange is on at least one side of each body portion. The **sealing** flanges each encircle the chamber and are formed from the corresponding flexible plastic body portion. The **sealing** flanges have a side on each facing the other and a side on each oppositely facing the other. A stiffener is on at least one of the **sealing** flanges. The stiffener encircles the enclosure and is positioned on the oppositely facing side of the corresponding **sealing** flange. Releasable clamps are disposed around the chamber for forcing the **sealing** flanges toward each other. The clamp acts through the stiffener on the corresponding **sealing** flanges. The clamps each have a first condition forcing the **sealing** flanges together to a first spacing and a second condition allowing the **sealing** flanges to be separated. Structure is provided in between the facing sides of the **sealing** flanges such that when the first condition exists, the structure exerts substantially balancing reaction forces between the facing sides from the chamber to the exterior of the **container**. The structure comprises a resilient gasket encircling the chamber in between the facing sides of the **sealing** flanges. The gasket is structured for providing, between the facing sides of the **sealing** flanges and the gasket, a gas-tight **seal**. The **closure** system balances the forces applied by the clamps with reactions exerted by the gasket structure and substantially eliminates side forces.



463) Family number: 19085209 (US3895736A)

Title: Press type **closure** with double **seal**

Priority: US19730404455 19731009

Family:

Publication number	Publication date	Application number	Application date
AT337075 B	19770610	AT19740008110	19741009
AT811074 A	19760915	AT19740008110	19741009
AU197473935 A1	19760408	AU19740073935	19741003
BE820860 A	19750203	BE19740149351	19741009
BR7408395 A0	19750923	BR19740008395	19741009
CA1027069 A1	19780228	CA19740210698	19741003
CH564162 A	19750715	CH19740013584	19741009
DE2447011 A1	19750417	DE19742447011	19741002
DE2447011 B2	19790927	DE19742447011	19741002
DE2447011 C3	19800612	DE19742447011	19741002
DK525974 A	19750609	DK19740005259	19741008
ES224244 U	19770116	ES19740224244U	19741009
ES224244 Y	19770516	ES19740224244U	19741009
FI292774 A	19750410	FI19740002927	19741008
FI57568 B	19800530	FI19740002927	19741008
FI57568 C	19800910	FI19740002927	19741008
FR2246462 A1	19750502	FR19740034042	19741009
FR2246462 B1	19810410	FR19740034042	19741009
GB1443882 A	19760728	GB19740043433	19741007
HK10777 A	19770311	HK19770000107	19770303
IE40623 B	19790718	IE19740002050	19741003
IE40623 L	19750409	IE19740002050	19741003
IT1022705 A	19780420	IT19740028200	19741008
JP1054414 C3	19810723	JP19740116808	19741009
JP50065377 A2	19750603	JP19740116808	19741009
JP55046944 B4	19801127	JP19740116808	19741009
MY7700207 A	19771231	MY19770000207	19771230
MY7700231 A	19771231	MY19770000231	19771230
NL152809 B	19770415	NL19740013206	19741008
NL7413206 A	19750411	NL19740013206	19741008
NO139045 B	19780918	NO19740003615	19741007
NO139045 C	19781227	NO19740003615	19741007
NO743615 A	19750505	NO19740003615	19741007
PH13672 A	19800826	PH19740016388	19741009
PL94581 P	19770831	PL19740174651	19741008
SE7412601 A	19750410	SE19740012601D	19741007
SE7412601 L	19750410	SE19740012601	19741007
US3895736 A	19750722	US19730404455	19731009
ZA7406466 A	19751126	ZA19740006466	19741009

Probable Assignee: DART IND INC

Assignee(s):(std)**:** FE ZUELLIG MALAYA SDN BHD ; DART INDUSTRIES INC TE LOS ANGELES ORNIE VER ST ; DART INDUSTRIES INC US ; DART IND INC

Assignee(s): DART IND INC LOS ANGELES CALIF V ST A ; DART INDUSTRIES INC ; DART INDUSTRIES INC LOS ANGELES CALIF V ST A ; DART INDUSTRIES INC LOS ANGELES CALIFORNIE VER ST ; DART INDUSTRIES INC TE LOS ANGELES ORNIE VER ST V ; DART INDUSTRIES INC LOS ANGELES CALIFORNIE VER ST V AM ; DART INDUSTRIES INC TE LOS ANGELES ORNIE VER ST V AM ; SWETT JAMES B

Inventor(s):(std)**:** JAMES BALDWIN SWETT ; SWETT J ; SWETT J B ; SWETT JAMES B ; SWETT JAMES BALDWIN

Inventor(s): SWETT JAMES BALDWIN BARRINGTON R I V ST A ; BALDWIN SWETT JAMES

International class (IPC 8-9): B65D41/00 B65D41/28 B65D43/02 B65D51/16 (Advanced/Invention); B65D41/00 B65D41/02 B65D43/02 B65D51/16 (Core/Invention)

International class (IPC 1-7): A47J47/00 B65D39/04 B65D41/00 B65D41/16 B65D41/18 B65D41/22 B65D41/28 B65D41/30 B65D43/06 B65D43/08 B65D43/10 B65D8/12 F16J13/14

CPC: B65D43/021 B65D51/1694 B65D2205/04 B65D2543/00092 B65D2543/00296 B65D2543/0037 B65D2543/00407 B65D2543/00509 B65D2543/00537 B65D2543/00555 B65D2543/0074 B65D2543/00796 B65D2543/0099

European class: B65D43/02S3D B65D51/16E3B L65D205/04 L65D543/00Y1F2C L65D543/00Y1M6 L65D543/00Y20D L65D543/00Y2F L65D543/00Y2K1 L65D543/00Y8D1C L65D543/00Y8D3 L65D543/00Y8D5 L65D543/00Y8S3B4 L65D543/00Y8S3D2

US class: 220/306 220/782 220/785 D7/391

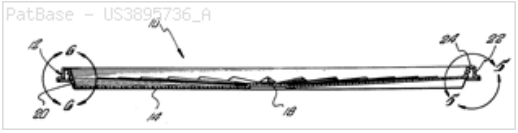
Classification Explorer

Cited documents: US3756480 A, US3692208 A, US3679088 A, US3510023 A, US3458079 A, US3156372 A, US2925187 A, US2266270 A, JP46001488 A2, JP46001486 A2, JP43005744 Y1, JP42009102 Y1,

Forward Citations: USRE28797, US9114916, US8403174, US8317060, US6568534, US5944211, US4431326, US4234100, US3979015, US2008047965, US2008041869, US2007007299, FR2665688, DE19930886,

Abstract:
Source: US3895736A A **closure** suitable of insertion over the **opening** of a tubular or similarly constructed member and adapted to hermetically **seal** that **opening**. The **closure** construction includes a fluted center main wall that particularly adapts it for placement upon the tubular member by a light application of finger pressure to the approximate center of the main wall. Likewise, the **sealing** feature of the **closure** includes upper and lower **sealing** beads positioned on the outside surface of the inner **seal** wall.

PatBase - US3895736_A



464) Family number: 1161632 (US3926309A)

Title: TWO LAYER STERILE **PACKAGING**

Priority: US19730384697 19730801

Family:

Publication number	Publication date	Application number	Application date
AU197469695 A1	19751204	AU19740069695	19740603
BE818362 A	19750203	BE19740147175	19740801
CA1024475 A1	19780117	CA19740205042	19740718
CH571984 A	19760130	CH19740009262	19740705
DE2429387 A1	19750213	DE19742429387	19740619
DE2429387 C2	19830922	DE19742429387	19740619
GB1455670 A	19761117	GB19740027339	19740620
JP1107027 C3	19820730	JP19740072180	19740624
JP50042992 A2	19750418	JP19740072180	19740624
JP56052790 B4	19811215	JP19740072180	19740624
US3926309 A	19751216	US19730384697	19730801
ZA7403608 A	19750528	ZA19740003608	19740606

Probable Assignee: VICRA STERILE INC

Assignee(s):(std)**:** TRAVENOL LABORATORIES ; VICRA STERILE ; VICRA STERILE INC

Assignee(s): TRAVENOL LABORATORIES INC MORTON GROVE ILL V ST A ; TRAVENOL LABORATORIES INC MORTON GROVE ILL US ; TRAVENOL LABORATORIES INC ; CENTER JOHN L ; TRAVENOL LAB INC

Inventor(s):(std)**:** CENTER J ; CENTER JOHN LLOYD ; CENTER J L ; CENTER JOHN L

Inventor(s): CENTER JOHN LLOYD DALLAS TEX VSTA ; CENTER JOHN LLOYD DALLAS TEX ; CENTER JOHN LLOYD DALLAS TEX US ; CENTER JOHN LLOYD DALLAS TEX V ST A ; JOHN LLOYD CENTER ; JOHN LLOYD GENTER ; JL CENTER ; J L CENTER

International class (IPC 8-9): A61B19/02 A61B19/04 A61M25/00 B65D75/30 B65D75/64 B65D81/20 B65D83/10 (Advanced/Invention); B65D81/20 (Advanced/Non-invention); A61B19/00 A61M25/00 B65D75/28 B65D75/52 B65D81/20 B65D83/08 (Core/Invention)

International class (IPC 1-7): A61B19/02 A61B19/04 A61L A61M25/00 B65B55/02 B65B9/00 B65D33/00 B65D75/14 B65D75/30 B65D77/32 B65D81/18 B65D81/20 B65D81/28 B65D83/10 B65D85/00

CPC: A61B50/30 B65D75/30 A61M25/002

European class: A61B19/02P A61M25/00P B65D75/30

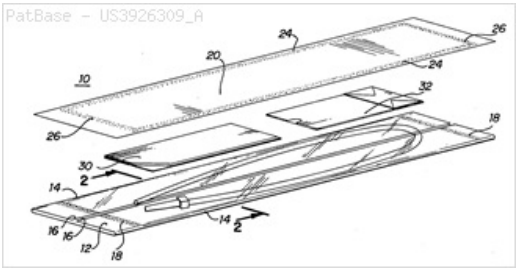
US class: 206/364 206/370 206/438

Classification Explorer

Cited documents: US3674195 A, US3472369 A, US3181695 A, US2793743 A,

Forward Citations: WO14132924, USRE36132, USRE36071, USD764943, USD746152, USD641466, US9649472, US9265578, US8622206, US8413810, US8101134, US7922983, US7770728, US7736341, US7615045, US7361317, US7334679, US7087048, US7087048, US7066912, US6736805, US6594971, US6406674, US6029422, US5868245, US5447231, US5372254, US5350067, US5284244, US5257692, US5031762, US5014494, US4925448, US4923061, US4848572, US4844259, US4779727, US4754877, US4568334, US4523679, US4522302, US4379506, US2009099531, US2008063325, US2007215497, US2007093758, US2006293642, US2004153051, US2003168365, US2003055403, JP5041560, JP2014132924, FR2462351, EP0913164, EP0366807, DE4428291, DE202005004585, DE202005004585, AU630604,

Abstract:
Source: US3926309A Two layer sterile **packaging** for separate articles such as a catheter, disposable glove and rinse **container**, employing a plastic sheet folded to bring the two opposite side edges adjacent, with each end of the folded sheet **sealed** to form a first pouch, a semi-permeable bacteria impermeable **closure** sheet overlying the plastic sheet including the area in which the two opposite side edges are disposed, such **closure** sheet being **sealed** about its perimeter to the plastic sheet and being of sufficient width to form a second pouch adjacent the plastic sheet; a catheter lies in the first pouch formed by the plastic sheet and a disposable glove and rinse **container** lies in the second pouch whereby the **package** may be **opened** by tearing away the **closure** sheet to permit removal of the **container** and glove from the second pouch so that the glove can be donned by the user, whereupon the catheter may be removed from the first pouch formed by the plastic sheet in a sterile condition.



465) Family number: 1187107 (US3970526A)

Title: Closed tank coke car construction

Priority: DE19732340256 19730809 DE19742455830 19741126 GB19740034596 19740806

Family:

Publication number	Publication date	Application number	Application date
AU197472147 A1	19760311	AU19740072147	19740808
AU197586939 A1	19770602	AU19750086939	19751125
BE818587 A	19750207	BE19740147377	19740807
BE835691 A4	19760518	BE19750161970	19751118
BE835691 R	19760518	BE19750161970	19751118
CA1039226 A1	19780926	CA19740206715	19740809
CA1050467 A1	19790313	CA19750240257	19751124
DE2340256 A1	19750227	DE19732340256	19730809
DE2340256 B2	19750605	DE19732340256	19730809
DE2455830 A1	19760610	DE19742455830	19741126
FR2240278 A1	19750307	FR19740027386	19740807
FR2240278 B1	19781124	FR19740027386	19740807
FR2292760 A2	19760625	FR19750035319	19751119
FR2292760 B2	19781229	FR19750035319	19751119
GB1483600 A	19770824	GB19740034596	19740806
GB1495056 A	19771214	GB19750047254	19751117
IT1021072 A	19780130	IT19740024799	19740704
JP50071701 A2	19750613	JP19740091163	19740808
JP51076301 A2	19760701	JP19750141058	19751125
JP53028281 B4	19780814	JP19740091163	19740808
JP57001845 U1	19820107	JP19810066755U	19810511
JP951665 C3	19790525	JP19740091163	19740808
NL7409671 A	19750211	NL19740009671	19740717
NL7511870 A	19760531	NL19750011870	19751009
SU597342 D	19780305	SU19742052692	19740802
US3970526 A	19760720	US19740495204	19740806
US4028192 A	19770607	US19750635285	19751126
ZA7405129 A	19751126	ZA19740005129	19740809
ZA7507171 A	19761027	ZA19750007171	19751114

Probable Assignee: STILL FA CARL

Assignee(s):(std)**:** HARTUNG KUHN AND CO GMBH FA ; HARTUNG KUHN AND CO MASCHF ; HARTUNG KUHN AND CO FA ; HARTUNG KUHN AND CO ; CARL STILL RECKLINGHAUSEN AND ; MASCHF ; STILL RECKLINGHAUSEN F C ; STILL CARL FA ; STILL CARL ; STILL CARL FRIEDRICH ; STILL FA CARL ; STILL C ; C STILL AND HATUNY KUHN AND CO GMB

Assignee(s): C STILL AND HATUNY KUHN AND CO GMBH FA ; CARL STILL FA ; BENDER MARTIN ; KAARU FURIIDORITSUHI SHUTEIRU ; HARUTSUNGU KUUN UNTO CO MAS FAB GMBH ; KARL SHTIL ; HARTUNG KUHN U CO GMBH ; STRATMANN JOSEF ; KNAPPSTEIN JOHANNES ; STILL CARL DT ; CARL STILL RECKLINGHAUSEN AND HARTUNG KUHN AND CO MAS FA ; CHINENFABRIK GMBH ; DITTA STILL C ; FA C STILL AND HATUNY KUHN AND CO GMBH ; FIRMA HARTUNG KUHN AND CO GMBH ; FIRMA CARL STILL ; HARTUNG KUHN AND CO MASCHINENFAB GMBH ; FA CARL STILL ; HARTUNG KUHN AND CO MASCHINENFABRIK GMBH ; FA CARL STILL 4350 RECKLINGHAUSEN ; GARTUNG KUN U KO MASHINENFABRIK GMBKH FIRMY ; FIRMA HARTUNG KUHN AND CO G M B H ; HARTUNG KUHN AND CO MASCHINENFABRIK G M B H ; GARTUNG KUN UND KO MASHINENFABRIK GMBKH FIRMY ; FIRMA CARL STILL RECKLINGHAUSEN AND HARTUNG KUHN AND CO MAS ; HARTUNG KUHN AND CO MASCHINENFABRIK GMBH 4000 DUESSELDORF ; FIRMA CARL STILL TE RECKLINGHAUSEN EN HARTUNG KUHN AND CO MASCHINENFABRIK GMBH TE DUESSELDORF BONDSREPUBLIEK DUITSLAND ; HARTUNG KUHN AND CO MASCHF GMBH

Inventor(s):(std)**:** BENDER M ; BENDER MARTIN ; KNAPPSTEIN J ; KNAPPSTEIN JOHANNES ; KNAPPSTEIN JOHANNES DR ; STRATMANN J ; STRATMANN JOSEF ; STRATMANN JOSEPH ; YOOZEFU SHUTORAATOMAN ; YOHANESU KUNATSUPUSHUTAIN ; MARUTEIN BENDAA ; SHTRATMANN IOZEF ; KNAPPSHTEJN IOGANNES

Inventor(s): MARTIN BENDER DT ; IOZEF SHTRATMANN DT ; IOGANNES KNAPPSHTEJN DT ; MARTIN BENDER JOHANNES KNAPPSTEIN ET JOSEF STRATMA ; MARTIN BENDER ; JOSEPH STRATMANN ; JOHANNES DR KNAPPSTEIN ; BENDER MARTIN 4000 DUESSELDORF ; M BENDER ; MARTIN BENDER JOHANNES KNAPPSTEIN ET JOSEF STRATMANN ; DR JOHANNES KNAPPSTEIN ; J KNAPPSTEIN ; J STRATMANN ; JOSEF STRATMANN

International class (IPC 8-9): C10B33/00 C10B39/02 C10B39/04 C10B39/14 C10B45/00 (Advanced/Invention); C10B33/00 C10B39/00 C10B45/00 (Core/Invention)

International class (IPC 1-7): B60P3/00 C10B33/00 C10B33/14 C10B39/00 C10B39/02 C10B39/12 C10B39/14 C10B45/00 C10B47/46

CPC: C10B33/003 C10B39/14 C10B39/04

European class: C10B33/00B C10B39/04 C10B39/14

US class: 105/240 105/247 105/254 105/255 105/423 202/227 202/230 202/253 202/262 202/263 202/95 414/204 414/215

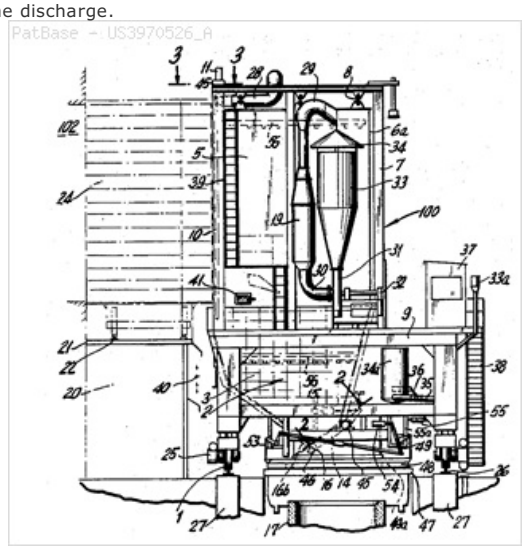
Classification Explorer

Cited documents: US3844900 A, US3843461 A, US3772155 A, US3748235 A, US3715282 A, US1105948 A, JP49064604 A2, JP49064603 A2, GB830469 A, DE839789 A,

Forward Citations: WO9012074, WO8100414, WO8001567, US5188039, US4886580, US4726465, US4559107, US4521279, US4392919, US4363702, US4285772, US4198275, US4196053, US4186057, US4096041, US4096040, JP54171673, JP52009646, FR2490234, EP0087694, DE3136558, DE3010286, DE3004175, CN101851517,

Abstract:
Source: US3970526A A coke oven discharge device for the closed discharge of coke from a horizontal row of coke ovens into a receiving bunker located alongside the ovens comprises a support frame which is mounted on an undercarriage for movement along a path alongside the rows of coke ovens. The tank is made up of a plurality of heat resistant metal plates which are suspended in loosely adjacent layers from strips and they overlap their adjacent plates. The tank includes a bottom with **openable** door means for selectively **opening** and closing a bottom discharge for discharging the coke into a receiving bunker. A separator and washer is connected to the tank for withdrawing gaseous dust and odors and for subjecting them to a washing and a removal of the dust. The tank carries a **sealing** sleeve which is engageable between the exterior of the tank around the

bottom discharge and a bunker to **seal** the space therebetween during the discharge.



466) Family number: 1312362 (US3974747A)

Title: MACHINE FOR MANUFACTURING SQUARE **BAGS** OF THERMOPLASTIC FILM

Priority: DE19742440491 19740823 JP19730096379 19730828 JP19730096381 19730828

Family:

Publication number	Publication date	Application number	Application date
DE2440491 A1	19750306	DE19742440491	19740823
DE2440491 C2	19830526	DE19742440491	19740823
DE2462424 A1	19770127	DE19742462424	19740823
DE2462424 C2	19830519	DE19742462424	19740823
FR2242301 A1	19750328	FR19740029405	19740828
FR2242301 B1	19800411	FR19740029405	19740828
GB1485132 A	19770908	GB19740037622	19740828
GB1485133 A	19770908	GB19770007358	19740828
IT1016845 A	19770620	IT19740069563	19740820
JP50047780 A2	19750428	JP19730096381	19730828
JP50047784 A2	19750428	JP19730096379	19730828
JP52029665 B4	19770803	JP19730096381	19730828
JP52045540 B4	19771116	JP19730096379	19730828
JP901467 C3	19780315	JP19730096381	19730828
JP915794 C3	19780721	JP19730096379	19730828
US3974747 A	19760817	US19740498817	19740821

Probable Assignee: DAINIPPON PRINTING CO LTD

Assignee(s):(std)**:** DAINIPPON PRINTING CO LTD

Assignee(s): DAI NIPPON PRINTING CO ; DAI NIPPON PRINTING CO LTD ; DAI NIPPON PRINTING CO LTD TOKIO ; DAI NIPPON PRINTING CO LTD TOKYO JP ; DAI NIPPON PRINTING COMPANY LIMITED ; DAI NIPPON PRINTING CY LTD ; DAI NIPPON PRINTING CY LTD JA

Inventor(s):(std)**:** TSUKINO YOSHIO

Inventor(s): TSUKINO YOSHIO KASHIWA CHIBA JAPAN ; TSUKINO YOSHIO KASHIWA CHIBA JP ; WIRD SPAETER GENANNT WERDEN

International class (IPC 8-9): B31B1/60 B31B1/64 B31B1/72 B31B1/84 B31B29/00 B31B29/60 B31B29/84 B31B37/00 B31B41/00 B31B49/04 B65D30/18 B65D30/24 (Advanced/Invention);
B31B1/60 B31B1/74 B31B29/00 B31B37/00 B31B41/00 B31B49/00 B65D30/10 B65D30/24 (Core/Invention)

International class (IPC 1-7): B29F B31B1/60 B31B1/84 B31B29/00 B31B31/00 B31B35/00 B31B35/74 B31B37/00 B31B41/00 B65D30/24 B65D31/00 B65D31/14 B65D33/00 B65D33/16

CPC: B65D31/142 B65D31/08 B31B70/844 B31B2150/00 B31B2150/0014 B31B2160/20

European class: B31B29/00 B31B29/84 B65D31/08 B65D31/14A L31B219/90J1 L31B221/20 L31B221/40B

US class: 493/206 493/209 493/213 493/218 93/8VB

Classification Explorer

Cited documents: US3853040 A, US3250187 A, US2559873 A, DE684840 A, DE1486482 A1, DE1297531 B,

Forward Citations: US5772332, US4264317, US4133252, GB2136771, DE2842954, DE2647432,

Abstract:
Source: US3974747A A square **bag** consisting of a tubular body made of thermoplastic film with its outer surface processed to be hardly weldable and a couple of rectangular **closures** made of thermoplastic film for closing the top and bottom **openings** of said body, said tubular body being flat when empty and the top and bottom **openings** of said body being formed into the front and rear horizontal flaps spreading horizontally and a pair of bisymmetric triangular end plates lapped over two sides of said flaps by pressing said **openings** vertically, which **bag** is characterized in that the top **closure** consists of a valve plate and a **cover** plate, one side edge of both plates is inserted beneath said triangular end plates, respectively, to overlap each other and heat-**sealed**, the other side edge of said **cover** plate extends over the other side edge of said valve plate to form a valve lip, the overlapping portions of the front and rear side edges of the valve plate and the **cover** plate and the front and rear side edges of the horizontal flaps of the top of the body are heat-**sealed**, and further the bottom **closure** consists of one **cover** plate which is installed on the bottom **opening** in the same fashion as said top **closure** and the overlapping portions of the body and said **cover** plate are heat-**sealed**.

PatBase - US3974747_A

FIG. 1

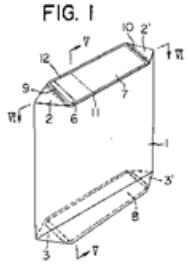


FIG. 2

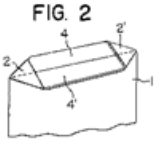


FIG. 3

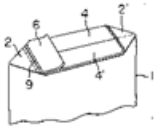
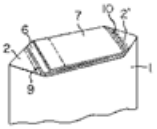


FIG. 5



FIG. 4



467) Family number: 25659145 (US3899295A)

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Title: INTEGRITY INDICATOR

Priority: US19730418486 19731123

Family:

Publication number	Publication date	Application number	Application date
AU197475553 A1	19760520	AU19740075553	19741120
BE822378 A	19750314	BE19740150669	19741119
BR7409816 A	19760525	BR19740009816	19741122
CH578977 A	19760831	CH19740015559	19741122
DD115083 A	00000000	DD19740182507	00000000
DD115083 C	19750912	DD19740182507	19741121
DE2455422 A1	19750528	DE19742455422	19741122
DK134804 B	19770124	DK19740006083	19741122
DK134804 C	19770620	DK19740006083	19741122
DK608374 A	19750721	DK19740006083	19741122
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FR2252619 A1	19750620	FR19740038479	19741122
FR2252619 B1	19790720	FR19740038479	19741122
GB1492377 A	19771116	GB19740050485	19741121
IE40209 B	19790411	IE19740002337	19741113
IE40209 L	19750523	IE19740002337	19741113
IL46094 A0	19750210	IL19740046094	19741121
IT1032137 A	19790530	IT19740054155	19741120
JP50085496 A2	19750710	JP19740135012	19741122
NL7415281 A	19750527	NL19740015281	19741122
NO744193 A	19750616	NO19740004193	19741121
SE407927 B	19790430	SE19740014589	19741120
SE407927 C	19790809	SE19740014589	19741120
SE7414589 A	19750526	SE19740014589D	19741120
US3899295 A	19750812	US19730418486	19731123
US4098577 A	19780704	US19750580574	19750527
ZA7407277 A	19751126	ZA19740007277	19741113

Probable Assignee: OAK HILL SPORTSWEAR CORP

Assignee(s):(std)**:** BIO MEDICAL SCIENCES INC

Assignee(s): BIO MEDICAL SCIENCES INC TE FAIRFIELD NEW JERSEY V ; BIO MEDICAL SCIENCES INC TE FAIRFIELD NEW JERSEY VER ST V AM ; BIO MEDICAL SCIENCES INC TE FAIRFIELD NEW JERSEY VERSTVAM ; BIO MEDICAL SCIENCES INC US ; BIO MEDISAL SCIENCES INC ; OAK HILL SPORTSWEAR CORP ; INFO CHEM INC

Inventor(s):(std)**:** HALPERN D ; HALPERN D F ; HALPERN DONALD F ; HALPERN DONALD FRANK ; D F HALPERN ; DONALD FRANK HALPERN

Inventor(s): FRANK HALPERN DONALD

International class (IPC 8-9): A61L2/28 B65D55/02 B65D79/02 B65D81/20 (Advanced/Invention);
A61L2/26 B65D55/02 B65D79/00 B65D81/20 (Core/Invention)

International class (IPC 1-7): A61J A61J1/00 B65B31/00 B65B31/02 B65B55/02 B65D33/34 B65D53/00 B65D55/00 B65D55/02 B65D73/00 B65D75/14 B65D79/00 B65D79/02 B65D81/18 B65D81/20 G01H G01M G01N21/06 G01N31/22 G09F3/03

CPC: Y10S206/807 B65D55/026 A61L2/28

European class: A61L2/28 B65D55/02G

US class: 101/491 116/206 128/202.22 128/203.21 128/205.23 206/364 206/365 206/459.1 206/484 206/807 23/232R 23/253TP 422/400 422/55 422/56 436/1 436/163 53/403

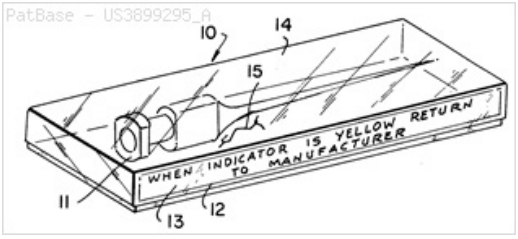
Classification Explorer

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Forward Citations: WO9612659, WO8905761, WO8403270, WO14020326, WO14020326, WO12042139, WO10146296, WO06036383, WO06036383, WO04114256, WO04114256, WO02094672, US9815593, US9810671, US9782326, US9752902, US9746421, US9637271, US9580215, US9486591, US9409682, US9334084, US9163961, US9144620, US9139348, US9134285, US9016037, US9005978, US9004281, US8871464, US8702237, US8663998, US8637271, US8523437, US8492162, US8470601, US8425996, US8388131, US8322555, US8244092, US8153394, US8137980, US7914752, US7913870, US7910531, US7850923, US7749531, US7636151, US7623752, US7618831, US7582952, US7570865, US7453579, US7417735, US7416081, US7415186, US7403323, US7394383, US7388704, US7369252, US7359066, US7343080, US7320545, US7299681, US7289256, US7272916, US7259865, US7187489, US7165887, US7155880, US7086782, US6994307, US6988348, US6913387, US6910806, US6910575, US6884394, US6874635, US6806092, US6793076, US6780646, US6706537, US6576474, US6553930, US6488890, US6485979, US6485978, US6440744, US6428748, US6416798, US6360513, US6346417, US6287518, US6238623, US6063631, US5893374, US5851611, US5753285, US5727684, US5692610, US5644899, US5641496, US5620656, US5617812, US5503835, US5477972, US5439648, US5368576, US5344017, US5293996, US5228573, US5161681, US5159799, US5137208, US5104704, US5103979, US5064664, US5028290, US4998989, US4987849, US4972953, US4945708, US4941573, US4928837, US4915913, US4910406, US4905851, US4890763, US4817800, US4813541, US4793505, US4793504, US4793503, US4793122, US4792053, US4671408, US4653113, US4591062, US4558794, US4526752, US4516679, US4511052, US4505399, US4502605, US4489841, US4454229, US4449631, US4428908, US4284599, US4235332, US4187798, US4098577, US2016264325, US2016166473, US2016137381, US2015225143, US2014353188, US2014332419, US2014262898, US2014124397, US2014116009, US2013270137, US2013243645, US2012128275, US2012122226, US2011177605, US2010330692, US2010279339, US2010224630, US2010224508, US2010217620, US2010196636, US2010089922, US2010043694, US2010024523, US2009303440, US2008135559, US2008129960, US2007219563, US2007003606, US2006257439, US2006254949, US2006240563, US2006236913, US2006207901, US2006176487, US2006121165, US2006092013, US2006077401, US2006067645, US2006027474, US2005283332, US2005126125, US2005123441, US2004265440, US2004115319, US2003196920, US2003170901, US2003102237, US2003101601, US2003092192, JP55038780, GB2243825, GB2243825, GB2235187, GB2235187, FR2946868, FR2461662, FR2442634, EP2767218, EP2662307, EP2385977, EP2093158, EP1522859, EP0627363, EP0625467, EP0439872, EP0292880, EP0186600, EP0186600, EP0105971,

EP0105971, EP0069342, DE4103283, DE4103283, DE202009003677, DE19859441, DE19831519, DE19831519, DE19821084, DE19821084, DE19804401, DE19804401, DE19804401, DE19655056, CN103282285, CN102482021,

Abstract:
Source: US3899295A A system for indicating the integrity of a normally **sealed** **package** utilizes a sensor containing a pH sensitive dye which displays a first color in equilibrium with normal atmospheric conditions and a second color when in equilibrium with an artificial atmosphere comprising an acidic gaseous material. When the air normally in the **package** is displaced by the artificial atmosphere, the pH sensitive dye assumes its second color. Loss of integrity of the **sealed** **package** results in loss of the acidic gaseous material. As a consequence, the pH sensitive dye reverts to its first color, thereby signaling the loss of **package** integrity.



468) Family number: 4866882 (US3871921A)

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Title: FLAT ALKALINE CELL CONSTRUCTION AND METHOD FOR ASSEMBLING THE SAME

Priority:

AU19750079620 19750327
CA19770275439 19770404
GB19750012837 19750327
JP19840252741 19841128
US19740456838 19740401
US19750559074 19750317
JP19760038419 19760405
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US19740456833 19740401
US19780946189 19780927
US19770782762 19770330
US19750559076 19750317

Family:

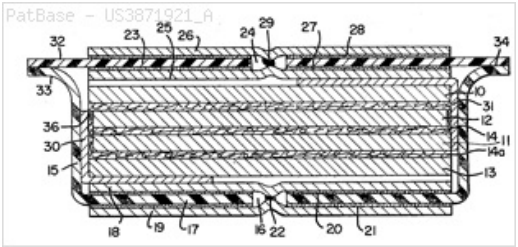
Publication number	Publication date	Application number	Application date
AU197579620 A1	19760930	AU19750079620	19750327
AU197612054 A1	19770922	AU19760012054	19760316
AU197612056 A1	19770922	AU19760012056	19760316
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AU507964 B2	19800306	AU19770023977	19770405
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BE839629 R	19760916	BE19760165221	19760316
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CA1039805 A1	19781003	CA19750223419	19750401
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CA1052859 A1	19790417	CA19760246835	19760301
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CA1082701 A1	19800729	CA19770275439	19770404
CH611743 A	19790615	CH19760003279	19760316
CH612040 A	19790629	CH19760003281	19760316
CH631715 A	19820831	CH19770004137	19770401
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DE2514124 B2	19780615	DE19752514124	19750329
DE2514124 C3	19790215	DE19752514124	19750329
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DE2610413 C3	19811112	DE19762610413	19760312
DE2610994 A1	19760923	DE19762610994	19760316
DE2610994 B2	19800131	DE19762610994	19760316
DE2610994 C3	19800925	DE19762610994	19760316
DE2714253 A1	19771027	DE19772714253	19770331
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FR2275035 A1	19760109	FR19750009954	19750328
FR2275035 B1	19810327	FR19750009954	19750328
FR2305032 A2	19761015	FR19760007508	19760316
FR2305032 B2	19810828	FR19760007508	19760316
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FR2375237 A1	19780721	FR19770010135	19770404
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GB1512212 A	19780524	GB19760010366	19760316
GB1534799 A	19781206	GB19760010374	19760316
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IT1035129 A	19791020	IT19750048858	19750328
IT1058005 A	19820410	IT19760048586	19760316
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JP1092119 C3	19820416	JP19760028551	19760316
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JP1304515 C3	19860228	JP19760038419	19760405
JP1380053 C3	19870528	JP19840252741	19841128
JP50140831 A2	19751112	JP19750039720	19750401
JP51115630 A2	19761012	JP19760028550	19760316
JP51116946 A2	19761014	JP19760028551	19760316
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JP57005011 B4	19820128	JP19760028550	19760316
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NL7703676 A	19771007	NL19770003676	19770404
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SE7703284 A	19771006	SE19770003284	19770322
SE7703284 L	19771006	SE19770003284	19770322
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US3945410 A	19760323	US19740456833	19740401
US3977906 A	19760831	US19750559074	19750317
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US4129654 A	19781212	US19770782762	19770330
US4202975 A	19800513	US19780946189	19780927

Probable Assignee:	EVEREADY BATTERY CO INC A CORP OF DE
Assignee(s):(std)**:**	KENT MOORE CORP ; UNION CARBIDE CORP ; TAKEDA CHEMICAL IND LTD ; TAKEDA CHEMICAL INDUSTRIES LTD
Assignee(s):	TAKEDA YAKUHIN KOGYO KK ; UNION CARBIDE CORP NEW YORK N Y V ST A ; TAKEDA CHEMICAL IND LTD TE OSAKA JAPAN ; UNION CARBIDE CORP 10017 NEW YORK N Y US ; VOURLIS HARRY ; BEATTY THEODORE R ; EVEREADY BATTERY CO INC ; EVEREADY BATTERY CO INC A CORP OF DE ; FURUKAWA YOSHIYASU ; MORGAN GUARANTY TRUST CO ; TAKEDA CHEMICAL ; MORGAN GUARANTY TRUST CO OF NEW YORK AND MORGAN BA ; KAWAI KIYOHISA ; MARUMOTO RYUJI ; MORGAN GUARANTY TRUST CO OF NEW YORK AND MORGAN BANK (DELAWARE) COLLATERAL (AGENTS) SEE RECORD FOR REMAINING ASSIGNEES AS ; MORGAN GUARANTY TRUST CO OF NEW YORK AND MORGAN BANK DELAWARE COLLATERAL AGENTS SEE RECORD FOR REMAINING ASSIGNEES AS
Inventor(s):(std)**:**	BEATTY THEODORE R ; BEATTY THEODORE ROBERT ; MARUMOTO RYUJI M ; VOURLIS H ; VOURLIS HARRY ; MARUMOTO RYUJI ; MARUMOTO RIYUUJI ; MARUMOTO R ; KAWAI KIYOTAKA ; KAWAI KIYOHISA ; KAWAI K ; FURUKAWA YOSHIYASU ; FURUKAWA Y ; FURUKAWA SUMIYASU ; BEATTY THEORDORE ROBERT ; BEATTY T R ; SEODOAA ROBAATO BIITEII ; HARII BOAARISU ; CLOGG WILLIAM G
Inventor(s):	HARRY VOURLIS ; BEATTY T R AND NOVROS H ; BEATTY THEODORE ROBERT BAY VILLAGE ; TR BEATTY ; THEODORE ROBERT BEATTY ; K KAWAI ; KIYOHISA KAWAI ; VOURLIS HARRY LAKEWOOD OHIO US ; Y FURUKAWA ; BEATTY THEORDORE ROBERT BAY VILLAGE OHIO US ; YOSHIYASU FURUKAWA ; VOURLIS HARRY LAKEWOOD ; RYUJI MARUMOTO ; ROBERT BEATTY THEODORE ; R MARUMOTO ; T R BEATTY ; THEODORE ROBERT BEATTY AND HARRY VOURLE ; FURUKAWA SUMYASU ; H VOURLIS ; KAWAI KYOHISA
Agent(s):	WM; FETHERSTONHAUGH AND CO
International class (IPC 8-9):	A61K31/50 A61K31/505 A61P1/04 A61P25/04 A61P25/20 A61P25/24 A61P25/26 A61P29/00 C07D239/545 C07D239/553 C07D239/62 C07D498/04 F01N3/28 H01M10/28 H01M10/34 H01M10/48 H01M2/02 H01M2/06 H01M2/08 H01M2/22 H01M2/26 H01M2/30 H01M6/12 H01M6/46 (Advanced/Invention); C07D239/54 H01M2/06 (Advanced/Non-invention); A61K31/50 A61K31/505 A61P1/00 A61P25/00 A61P29/00 C07D239/00 C07D498/00 F01N3/28 H01M10/34 H01M10/42 H01M2/02 H01M2/06 H01M2/22 H01M2/26 H01M2/30 H01M6/04 (Core/Invention); H01M (Subclass/Invention)
International class (IPC 1-7):	A61K31/42 A61K31/505 B65B1/08 C07D239/00 C07D239/42 C07D261/00 C07D295/08 C07D491/04 C07D498/04 H01M1/02 H01M10/24 H01M10/28 H01M10/30 H01M10/42 H01M10/48 H01M10/52 H01M2/02 H01M2/06 H01M2/08 H01M2/18 H01M2/20 H01M2/22 H01M2/26 H01M2/30 H01M21/00 H01M4/24 H01M4/64 H01M43/00 H01M6/00 H01M6/02 H01M6/04 H01M6/06 H01M6/12 H01M6/46 H01M6/50
CPC:	F01N3/28 F01N2450/04 Y10S514/825 H01M6/12 H01M2/021 H01M10/34 C07D239/553 C07D239/545 C07D239/62
European class:	124HC5B7B0+B3C0+2 C07D239/545 C07D239/553 C07D239/62 C07D498/04 F01N3/28 H01M10/34 H01M2/02B4B H01M6/12 R01N450/04 Y02E60/12
US class:	136/111 141/378 141/67 366/108 422/177 424/251 429/136 429/162 429/178 429/181 429/185 429/206 429/59 429/61 429/90 514/259.2 514/825 544/255 544/299 544/303 544/312 544/313

Classification Explorer

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Forward Citations:	USRE39676, US7820329, US7776468, US7699899, US7597992, US7531271, US7426104, US7413828, US6677077, US6653023, US6312848, US6258473, US6165638, US5935728, US5935724, US5811204, US5569554, US5290640, US5279625, US5134046, US5069988, US5057385, US5004656, US4891048, US4504662, US4331745, US4321315, US4147838, US3982966, US3945850, US3944435, US2012141863, US2009000090, US2008171259, US2006204839, US2006061938, US2005214648, US2005208381, US2005208373, FR2589007, FR2460043, FR2443142, FR2310638, EP0129837, EP0129837, EP0088413, EP0064943, DE2945996, DE2907383, DE2851950,

Abstract:
Source: US3871921A A flat alkaline cell is described which comprises an electrode assembly including at least a pair of flat electrode elements of opposite polarity and a porous separator containing the alkaline electrolyte interposed between and in contact with the pair of electrode elements, wherein the electrode assembly is enclosed within a **sealed**, liquidimpervious plastic film envelope having an **opening** in one wall thereof and wherein flat internal and external current collectors are disposed adjacent to the inner and outer sides of the wall, respectively, overlying the **opening**, the collectors being tightly adhered to the respective sides of the wall by thin layers of an adhesive sealant which is non-wettable by the alkaline electrolyte. Means are provided for making electrical connection between the current collectors through the **opening** in the wall. Also disclosed is a method for assembling the flat cell wherein a composite collector-wall member is formed prior to completion of the **sealed** envelope.



469) Family number: 1130304 (US3873735A)

© PatBase

Title: FOOD **PACKAGE** FOR HEATING AND VENTING

Priority: US19710140103 19710504

Family:

Publication number	Publication date	Application number	Application date
US3873735 A	19750325	US19710140103	19710504

Probable Assignee: NABISCO INC

Assignee(s):(std)**:** NABISCO INC

Inventor(s):(std)**:** CHALIN MANUEL L ; SMITH ARTHUR E

International class (IPC 8-9): B65D75/58 B65D81/34 (Advanced/Invention);
B65D75/30 B65D75/32 (Advanced/Non-invention);
B65D75/52 B65D81/34 (Core/Invention);
B65D75/28 (Core/Non-invention)

International class (IPC 1-7): A23L1/01 B65B25/22

CPC: Y10S206/806 Y10S206/815 B65D75/5816 B65D75/30 B65D75/32 B65D75/58 B65D75/5805 B65D75/5827 B65D81/3492 B65D2205/00

European class: B65D75/58 B65D75/58B B65D75/58D B65D75/58E B65D81/34T L65D205/00 L65D75/30 L65D75/32

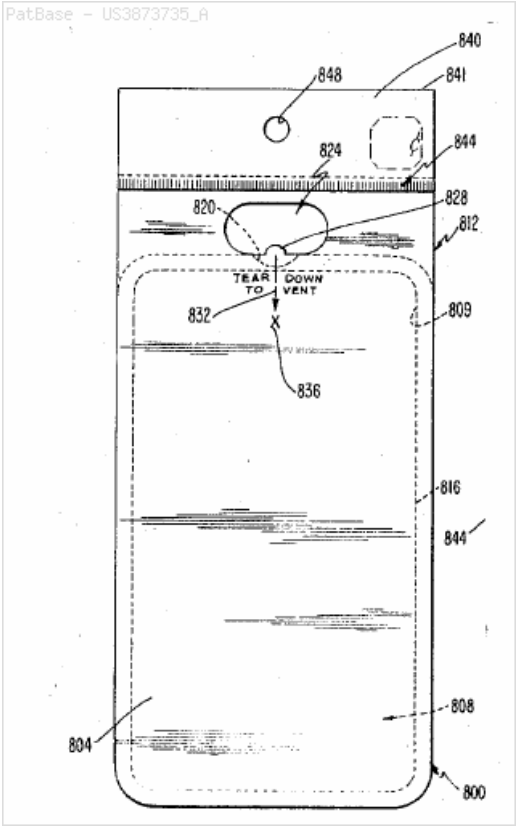
US class: 206/459.5 206/557 206/806 206/815 229/120 229/123.1 229/123.2 229/125.35 229/164.1 229/239 383/100 383/200 383/22 383/6 383/7 426/107 426/110 426/113 426/114 426/118 426/123 426/87 426/88

Classification Explorer

Cited documents: US3663507 A, US3663239 A, US3656922 A, US3615711 A, US3615706 A, US3597238 A, US3556337 A, US3498018 A, US3446632 A, US3398877 A, US3361576 A, US3054679 A, US2912336 A, US2764005 A,

Forward Citations: WO9323310, WO8603931, WO12001684, WO10114535, WO09055051, USD717162, USD703547, USD682710, USD680426, USD676334, USD671012, USD670573, USD669367, USD663631, USD660719, USD660718, USD653495, USD652719, USD652718, USD652298, USD649406, USD644101, USD641642, USD641238, USD640921, USD636220, USD634643, USD632570, USD632569, USD632568, USD632567, USD632566, USD632565, USD632564, USD632560, USD629702, USD628903, USD623074, USD623073, USD623072, USD621719, USD620809, US9815607, US9676539, US9505542, US9346603, US9211030, US9132951, US9079704, US9061796, US9027825, US8887918, US8866056, US8850964, US8777487, US8735786, US8729437, US8613249, US8610039, US8490577, US8403161, US8336495, US8302528, US8028503, US7927712, US7891875, US7828142, US7824720, US7722960, US7585528, US7243789, US7141259, US7118792, US7015442, US6959808, US6951999, US6896919, US6733807, US6660983, US6655948, US6635292, US6607765, US6574944, US6530767, US6517879, US6488973, US6396036, US6395317, US6342258, US6306448, US6153232, US6137098, US6129265, US6100513, US6077551, US6066346, US6005234, US5994685, US5984088, US5942267, US5894707, US5853781, US5773801, US5770839, US5749657, US5728416, US5706961, US5690853, US5650084, US5620095, US5582853, US5480024, US5474818, US5464285, US5405629, US5343903, US5265783, US5241150, US5195829, US5175011, US5077064, US5074416, US5060803, US5044777, US5044265, US4961944, US4873919, US4848649, US4795270, US4784864, US4691374, US4598826, US4596713, US4590850, US4550654, US4499817, US4426401, US4412482, US4378069, US4292332, US4204105, US4196331, US4143165, US4141487, US4137333, US4116649, US4013798, US4011949, US2016107822, US2013068828, US2012328745, US2012000968, US2011158565, US2011155622, US2011120992, US2011064338, US2011033133, US2011011864, US2010320206, US2010270330, US2010247720, US2010195939, US2010183891, US2010176125, US2010176020, US2010166924, US2010068353, US2010015293, US2009238497, US2009142455, US2009136647, US2009117323, US2009078125, US2009035433, US2009026202, US2008210686, US2008166457, US2008087268, US2008035495, US2007164045, US2007116806, US2007090103, US2007065548, US2007009699, US2006169604, US2006147129, US2006099307, US2006086068, US2006046061, US2005279224, US2005269219, US2005233034, US2005184065, US2005175742, US2005163899, US2005150805, US2005126941, US2005118315, US2005074528, US2005019455, US2005013905, US2004232026, US2004217112, US2004134815, US2004048081, US2004011452, US2003230054, US2003213707, US2003205575, US2003138169, US2003003207, US2002127310, US2002119225, FR2829117, FR2480713, EP1291294, EP1223114, EP0947444, EP0295141, EP0295141, EP0135649, EP0113327, EP0038114,

Abstract:
Source: US3873735A Several **packages** are disclosed which contain food and which are used for storing, heating and serving the food. The food may be heated by inserting the **package** in an electric toaster or other similar heating device.


PatBase - US3873735_A
840
848
841
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820
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812
TEAR DOWN TO VENT
832
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836
816
844
808
804
800

470) Family number: 30948422 (US3971502A)

Title: **Box**-shaped product

Priority: SE19730013202 19730927 SE19740003746 19740320

Family:

Publication number	Publication date	Application number	Application date
CA1003379 A1	19770111	CA19740210154	19740926
DD117414 C	19760112	DD19750181372	19750927
DE2446242 A1	19750403	DE19742446242	19740927
DK138833 B	19781106	DK19740005063	19740926
DK138833 C	19790423	DK19740005063	19740926
DK506374 A	19750526	DK19740005063	19740926
FI280174 A	19750328	FI19740002801	19740926
FI56150 B	19790831	FI19740002801	19740926
FI56150 C	19791210	FI19740002801	19740926
FR2246456 A1	19750502	FR19740032730	19740927
FR2246456 B1	19800530	FR19740032730	19740927
GB1482965 A	19770817	GB19740041681	19740925
IT1023863 A	19780530	IT19740012977	19740926
JP1164912 C3	19830826	JP19740110662	19740927
JP50077184 A2	19750624	JP19740110662	19740927
JP57057332 B4	19821203	JP19740110662	19740927
NO142620 B	19800609	NO19740003471	19740926
NO142620 C	19800917	NO19740003471	19740926
NO743471 A	19750505	NO19740003471	19740926
SE377921 B	19750804	SE19730013202	19730927
SE377921 C	19751113	SE19730013202	19730927
SE7313202 A	19750401	SE19730013202D	19730927
SE7403746 A	19751128	SE19740003746D	19740320
SE7403746 L	19751128	SE19740003746	19740320
US3971502 A	19760727	US19740509038	19740925

Probable Assignee: GRUNDELL CARL E

Assignee(s):(std)**:** GRUNDEL C ; GRUNDELL CARL E ; GRUNDELL CARL ERIK ; KAARU ERITSUKU GURUNDERU

Assignee(s): CARL ERIK GRUNDELL ; GRUNDELL CARL ERIK SW ; GRUNDELL C E

Inventor(s):(std)**:** GRUNDELL C E ; GRUNDELL CARL ERIK ; KAARU ERITSUKU GURUNDERU

Inventor(s): CARL ERIK GRUNDELL

International class (IPC 8-9): B65D5/20 B65D5/38 B65D5/44 B65D5/56 B65D5/62 (Advanced/Invention); B65D5/00 B65D5/20 B65D5/42 B65D5/44 B65D5/56 (Core/Invention)

International class (IPC 1-7): B31B B31B49/02 B42F15/00 B65D5/00 B65D5/18 B65D5/20 B65D5/22 B65D5/32 B65D5/34 B65D5/38 B65D5/44 B65D5/56 B65D5/62 B65D5/66

CPC: B65D5/38 B65D5/62

European class: B65D5/38 B65D5/62

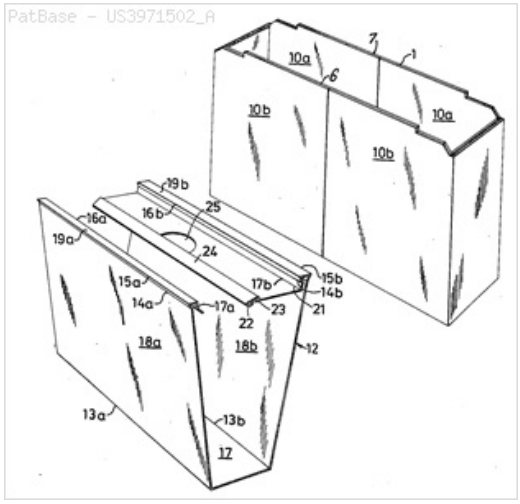
US class: 229/122 229/122.32 229/14R 312/184 40/359

Classification Explorer

Cited documents: US3779393 A, US3495756 A, US3298374 A, US2274344 A, US1798321 A, US1738120 A,

Forward Citations: USRE33953, USD423587, US6910622, US2009028467, US2008030016, US2003089762,

Abstract:
Source: US3971502A A **box** having an inner **box**-shaped member of a relatively rigid but foldable material and having at least one side **open** and a **cover** member of a relatively thin, but foldable material which extends over at least the bottom and two opposite sides of said **box**-shaped member as well as the upper portions of said **box**-shaped member sides with a profile on said side upper portions.



471) Family number: 1171553 (US3921630A)

Title: THERMOPLASTIC BOTTLE WITH CONTROLLED LATERAL COLLAPSE AND METHOD OF **DISPENSING** LIQUID THEREFROM

Priority: US19740445836 19740226

Family:

Publication number	Publication date	Application number	Application date
AR201642 A1	19750331	AR19750257642	19750214
AU197477060 A1	19760701	AU19740077060	19741231
BE825117 A	19750529	BE19750153000	19750203
BR7500745 A	19751202	BR19750000745	19750205
CA1046013 A1	19790109	CA19740217210	19741231
CH582093 A	19761130	CH19750001819	19750214
DE2502310 A1	19750828	DE19752502310	19750121
EG11580 A	19770815	EG19750000045	19750201
ES433993 A1	19761116	ES19750433993	19750121
FR2261781 A1	19750919	FR19750000005	19750102
FR2261781 B1	19811127	FR19750000005	19750102
GB1483553 A	19770824	GB19750007395	19750221
IN143639 A	19780107	IN1974CA02874	19741228
IT1026409 A	19780920	IT19750047775	19750121
JP50118888 A2	19750917	JP19750021433	19750220
PH11706 A	19780524	PH19750016716	19750116
TR19086 A	19780501	TR19750019086	19750117
US3921630 A	19751125	US19740445836	19740226
ZA7500035 A	19760128	ZA19750000035	19750102

Probable Assignee: MCGAW INC MORAINE MONTGOMERY COUNTY A CORP OF OH

Assignee(s):(std)**:** AMERICAN HOSPITAL SUPPLY CORP

Assignee(s): AMERICAN HOSPITAL SUPPLY CORP US ; GENERAL ELECTRIC CAPITAL A NEW YORK CORP CORP ; GENERAL ELECTRIC CAPITAL CORP ; KENDALL MCGAW LABORATORIES INC ; WELLS FARGO BANK NA ; MCGAW INC ; KENDALL MCGAW LABORATORIES INC A CORP OF OH ; KENDALL MCGAW LABORATORIES INC AN OH CORP ; MCGAW INC A CORP OF DELAWARE ; MCGAW INC MORAINE MONTGOMERY COUNTY A CORP OF OH ; MCPHEE CHARLES J

Inventor(s):(std)**:** MCPHEE CHARLES J ; MCPHEE CHARLES JOSEPH ; MOPHEE CH J ; PCPHEE C ; MCPHEEL C ; MCPHEE C

Inventor(s): CHARLES JOSEPH MCPHEE ; JOSEPH MCPHEE CHARLES

International class (IPC 8-9): A61J1/00 A61J1/05 A61M5/14 B65D47/00 (Advanced/Invention); A61J1/00 A61J1/05 B65D47/00 (Core/Invention)

International class (IPC 1-7): A61J1/00 A61M1/02 A61M5/14 B65B31/02 B65D1/02 B65D1/08 B65D23/04 B65D23/10 B65D47/00

CPC: Y10S128/24 Y10S215/03 Y10S215/90 A61J1/05 A61J2200/76

European class: A61J1/00T A61J1/05 K61J200/76

US class: 128/214R 128/DIG.24 215/231 215/373 215/382 215/399 215/900 215/DIG.3 222/107 604/251 604/257 604/530

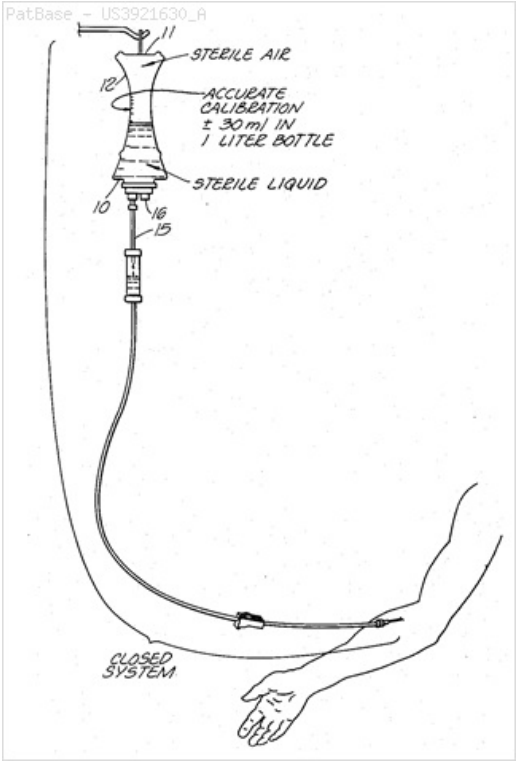
Classification Explorer

Cited documents: US3215299 A, US3202324 A, US3171412 A, US3081002 A, US2335799 A, US2261065 A,

Forward Citations: WO9606959, WO8903697, WO13120341, USRE32065, USD551980, US8863991, US7357267, US7147121, US6997337, US6578723, US6422415, US6117285, US6116457, US6106504, US6007686, US5950878, US5839614, US5776109, US5403538, US5377877, US5222615, US5083678, US5006118, US4886504, US4754891, US4717047, US4715279, US4700871, US4598834, US4553970, US4527703, US4479989, US4430074, US4423819, US4336802, US4334640, US4308904, US4253458, US4125186, US4096897, US4049033, US2012132609, US2011240673, US2007092858, US2006111681, US2004195253, JP59024041, JP57045944, JP56019236, JP3040313, GB2335900, FR2615387, FR2579102, FR2419876, EP0144543, DE4003041, DE4003040, AU596825,

Abstract:
Source: US3921630A A collapsible oval thermoplastic bottle that accurately measures the volume of sterile medical liquid **dispensed** without inletting air into the bottle. The bottle contains a sterile liquid and a constant mass of sterile gas above the liquid. A rigid oval base and a rigid oval shoulder of the bottle cooperate with a flexible oval side wall of the bottle to "control the lateral collapse" of the bottle. This "controlled collapse" redistributes the constant mass of gas within the bottle to maintain portions of the side wall at the liquid level in space relationship for accurate volumetric readings against calibrations on the bottle. A 1 liter collapsible bottle has an accuracy of +/-30 ml., which accuracy is equivalent to that of a rigid glass bottle of the same size.

PatBase - US3921630_A



472) Family number: 1132331 (US3876068A)

© PatBase

Title: SUTURE REEL-**LABEL** **PACKAGE**

Priority: US19730386672 19730808 US19750553392 19750227

Family:

Publication number	Publication date	Application number	Application date
CA1014528 A1	19770726	CA19740203847	19740702
US3876068 A	19750408	US19730386672	19730808
US3959947 A	19760601	US19750553392	19750227

Probable Assignee: AMERICAN CYANAMID CO

Assignee(s):(std)**:** AMERICAN CYANAMID CO

Assignee(s): AMERICAN CYANAMID COMPANY ; SONNINO MARIO

Inventor(s):(std)**:** SONNINO MARIO

International class (IPC 8-9): A61B17/02 A61B17/06 (Advanced/Invention); A61B17/02 A61B17/06 (Core/Invention)

International class (IPC 1-7): A61B17/06 A61L17/02 B65B25/00 B65B63/04

CPC: A61B17/06123 A61B17/06138 A61B2017/06142

European class: A61B17/06P2F A61B17/06P4F K61B17/06P7

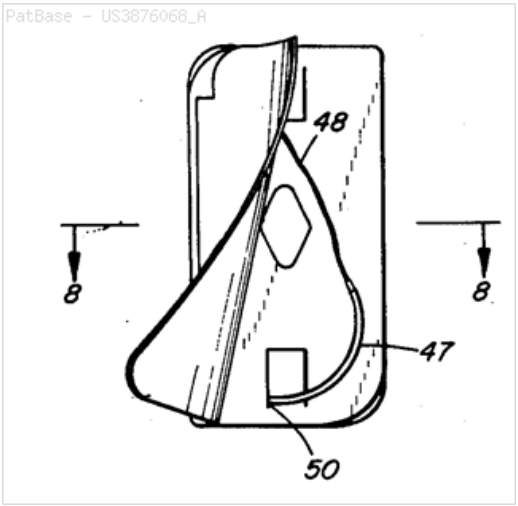
US class: 206/227 206/63.3 242/159 53/21FW 53/397 53/430

Classification Explorer

Cited documents: US3869044 A, US3648949 A, US3376973 A, US3357550 A, US3206018 A, US3185299 A, US3180487 A, US3136418 A, US2949181 A,

Forward Citations: WO0071015, WO0071015, USRE46078, USRE46008, USRE44501, USD639004, USD639003, USD639002, US9714138, US8833592, US8746445, US8739501, US8690017, US8647587, US8635838, US8567157, US8215089, US8136656, US8127519, US7655009, US7410488, US7146785, US7070044, US6915623, US6709436, US6659270, US6467612, US6440364, US6254616, US5819918, US5788062, US5675961, US5669490, US5584164, US5560477, US5503266, US5468252, US5461844, US5460263, US5442896, US5435438, US5425445, US5390782, US5386912, US5366081, US5359831, US5301801, US5277299, US5249672, US5228565, US5222978, US5220769, US5217772, US5179818, US5178277, US5129511, US4700833, US4483437, US4427109, US4412614, US4142628, US4120395, US4089410, US4069912, US4063638, US3951261, US2011104022, US2011100996, US2011100995, US2011099958, US2011099957, US2011099956, US2011099950, US2011099945, US2011099944, US2010005759, US2007256945, US2006200141, US2005187550, US2005034431, US2005028491, US2003025023, GB2334503, GB2334503, FR2383672, FR2383650, EP0536568, EP0505612, EP0493837, EP0128022, DK152252,

Abstract:
Source: US3876068A Surgical sutures, including ligatures, are wound from a needled or free end on a printed reel-**label**. The reellabel is made from **sealed** together thicknesses of stiff inert sterilizable **label** stock, with means, such as an aperture or grommet, to act as a rotable axis to permit holding between a finger and thumb for unwinding. A needle, if attached, is held in a pocket between the thicknesses with the armed portions of the needle protected. The friction between the thicknesses and the suture permits retention of the suture during **storage** and unwinding from either end. The suture reel assembly is stored in a sterile envelope which may be completely dry. The thus formed **package** protects the suture from kinks during **storage**, it protects the suture from the needle and the **package** from the needle. It permits unwinding from either end without tangling and it is capable of being rewound. 6 Claims, 16 Drawing Figures



473) Family number: 1166632 (US3923198A)

Title: Stress-opacifiable tamper indicator

Priority: AU19740073347 19740916 US19730397876 19730917 US19740499279 19740821

Family:

Publication number	Publication date	Application number	Application date
AU197473347 A1	19760318	AU19740073347	19740916
CA1020120 A1	19771101	CA19740209261	19740916
DE2444616 A1	19750430	DE19742444616	19740916
FR2243887 A1	19750411	FR19740031186	19740916
FR2243887 B1	19780224	FR19740031186	19740916
GB1471728 A	19770427	GB19740040272	19740916
IT1032082 A	19790530	IT19740053046	19740916
US3923198 A	19751202	US19740499279	19740821

Probable Assignee: 3M CO

Assignee(s):(std)**:** 3M CO ; MINNESOTA MINING AND MFG

Assignee(s): MINNESOTA MINING AND MFG CO ; MINNESOTA MINING MANUFACTURING ; MINNESOTA MINING MANUFACTURING US ; MINNESOTA MINING MFG CO ; BROCHMAN WILFRED R ; MINNESOTA MINING AND MANUFACTURING CO ; MINNESOTA MINING AND MANUFACTURING COMPANY

Inventor(s):(std)**:** BROCHMAN WILFRIED REINHOLTZ ; BROCHMAN WILFRED R

Inventor(s): WILFRIED REINHOLTZ BROCHMAN ; WILFRED REINHOLTZ BRUCHMAN

International class (IPC 8-9): B65D17/50 B65D41/00 B65D55/08 (Advanced/Invention); B65D17/00 B65D41/00 B65D55/02 (Core/Invention)

International class (IPC 1-7): B65D17/16 B65D17/50 B65D41/00 B65D55/02 B65D55/06 B65D65/26 B65D77/20 B65D77/30 G09F3/02

CPC: B65D17/502 B65D55/0818 B65D55/0854 B65D2101/0084 B65D2517/0013 B65D2517/5035 B65D2517/5083

European class: B65D17/50A1 B65D55/08B B65D55/08B3 L65D101/00A6 L65D517/00Y2B L65D517/50M10B1 L65D517/50Q5

US class: 215/203 220/214 220/359 220/359.2 283/114 283/81 283/94 283/95

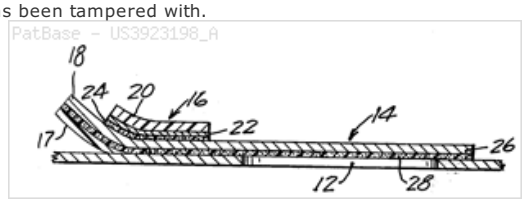
Classification Explorer

Cited documents: US3680236 A, US3516852 A, US3468744 A, US3389827 A, US3312368 A, US2790286 A,

Forward Citations: WO8403270, WO07009106, WO06027159, WO0032695, US9637264, US9221573, US8678493, US8535464, US8496291, US8292223, US8282754, US8094041, US7252569, US7178867, US6960110, US6797756, US6527900, US6301767, US6284337, US6108475, US6033519, US5798169, US5770283, US5683774, US5658411, US5641084, US5631068, US5514442, US5510171, US5477972, US5433992, US5358281, US5294470, US5261990, US5234732, US5219194, US5217790, US5199618, US5103979, US5064664, US5012946, US5004111, US4998666, US4934544, US4911302, US4905851, US4865198, US4793505, US4793504, US4793503, US4793122, US4792053, US4736857, US4709397, US4709396, US4558794, US4557505, US4519515, US4511052, US4505399, US4502605, US4489841, US4480760, US4454956, US4234099, US2009243868, US2009242695, US2009145539, US2008106127, US2007123836, US2007015422, US2006138813, US2005062319, US2004150221, US2004076721, US2003134112, JP60500524, JP1772225, EP1149134, EP0949153, EP0431240, EP0287507, EP0287507, EP0205457, EP0205457, EP0148030, EP0128269, EP0116892, EP0109592, EP0105971, EP0105971, DE2941381, DE2655632,

Abstract:

Source: US3923198A A **container** is hermetically **sealed** with an easy **opening** tape **closure**, at least a portion of which opacifies when stressed, providing a visual indication that the **closure** has been tampered with.



474) Family number: 1134651 (US3878771A)

Title: MANUFACTURE OF PAPERBOARD CARTONS WITH LIQUID-PROOF LINERS

Priority: US19720265964 19720626 US19730371376 19730619 US19750552567 19750224

Family:

Publication number	Publication date	Application number	Application date
GB1432449 A	19760414	GB19730030264	19730626
US3878771 A	19750422	US19720265964	19720626
US3902652 A	19750902	US19730371376	19730619
US3952940 A	19760427	US19750552567	19750224

Probable Assignee: FLAG CARTON CORP LTD

Assignee(s):(std)**:** FLAG CARTON CORP LTD ; MALCOLM J A ; MALCOLM JAMES A

Assignee(s): FLAG CARTON LTD CORP

Inventor(s):(std)**:** MALCOLM JAMES A

International class (IPC 8-9): B31B7/00 B65D5/468 B65D5/60 B65D5/70 (Advanced/Invention); B31B7/00 B65D5/46 B65D5/56 B65D5/70 (Core/Invention)

International class (IPC 1-7): B31B7/00 B31B7/02 B65D5/40 B65D5/56 B65D5/70

CPC: B65D5/703 Y10T156/1054 Y10T156/1077 Y10T156/1339 B65D5/4608 B65D5/70 B65D5/606 B31B2105/00 B31B2120/408

European class: B31B7/00 B65D5/46B1 B65D5/60B2 B65D5/70 B65D5/70B1 L31B217/00C2

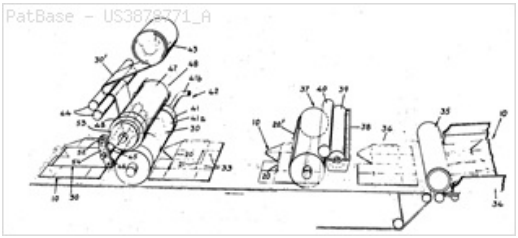
US class: 156/251 156/265 156/521 222/566 222/81 229/117.16 229/117.31 229/117.32 229/14BA 229/231 493/129 493/132 493/67 493/87 493/97 493/98 93/36.01

Classification Explorer

Cited documents: US3807624 A, US3550833 A, US3539360 A, US3464619 A, US3459357 A, US3426955 A, US3387764 A, US3142231 A, US2980304 A, US2933229 A, US2434756 A, US2350451 A, US2337730 A, US2273470 A, US2099257 A, GB875658 A,

Forward Citations: WO9938779, WO9803330, WO9601766, WO9600651, WO9200230, WO8801970, WO12161592, WO12161592, WO09098493, WO09098493, WO04024590, WO0020213, WO0020213, USD740564, USD721495, USD720539, USD712251, USD711738, USD711108, USD709704, USD698152, USD690107, USD690106, USD690105, USD605898, US9844920, US9758285, US9643749, US9434124, US9352888, US9242759, US9051075, US8720769, US8403820, US8317671, US8220701, US7883000, US7757886, US7641070, US7571835, US7503142, US7222453, US7201714, US7007825, US6915829, US6843155, US6758375, US6612973, US6460741, US6374541, US6305600, US6296134, US6253993, US6227440, US6098850, US5989171, US5906568, US5855298, US5803302, US5799818, US5772569, US5769273, US5766121, US5735429, US5564622, US5551600, US5433345, US5413232, US5364333, US5356028, US5351849, US5344066, US5193712, US5154324, US5147062, US5114069, US4846587, US4815631, US4580342, US4566928, US4478351, US4410128, US4382538, US4327861, US4284195, US4247349, US4194439, US4120420, US4087003, US2015041495, US2014151443, US2014128235, US2014123604, US2012297736, US2012267385, US2011017814, US2011017812, US2010200601, US2010193575, US2009078750, US2008119343, US2008000920, US2007199961, US2006207513, US2006097005, US2005269388, US2005236465, US2005235554, US2005045271, US2004089672, US2004007318, US2004004111, KR101737359, JP2015536846, JP2007145385, GB2382796, GB2382796, GB2382796, GB2357456, GB2357456, GB2357456, FR2664874, FR2347278, ES2235567, EP2514685, EP2183164, EP1049630, EP0729828,

Abstract:
Source: US3878771A **Containers** are manufactured from flat paperboard blanks and liquid-proof liners which are laid flat on the blanks and **cover** adhesive thereon so that the assembled blanks and liners can if desired be stacked and stored. The liners are made from continuous tubular flexible material that is fed around a rotating cylinder where the liners are severed from the continuous material. The liners are **sealed** across one end, forming **bags** which when the **containers** are set up form ears at corners thereof. An ear can be used as a corner pouring spout; an ear can be adhered to an end flap of the **container** to be pierced by a pouring spout; and the **container** can be **opened** at a corner where the **bag** is adhered thereto, thereby **opening** the **bag**.



475) Family number: 1201343 (US3920979A)

Title: Electronic check writer

Priority: US19730407804 19731019

Family:

Publication number	Publication date	Application number	Application date
CA1058756 A1	19790717	CA19740206605	19740808
DE2449665 A1	19750430	DE19742449665	19741018
FR2248556 A1	19750516	FR19740035181	19741018
FR2248556 B1	19790209	FR19740035181	19741018
GB1483112 A	19770817	GB19740044830	19741016
IT1021679 A	19780220	IT19740053312	19741001
JP1054984 C3	19810723	JP19740119161	19741016
JP50068597 A2	19750607	JP19740119161	19741016
JP55047425 B4	19801129	JP19740119161	19741016
NL7413649 A	19750422	NL19740013649	19741017
US3920979 A	19751118	US19730407804	19731019

Probable Assignee: KILBY J

Assignee(s):(std)**:** KILBY J ; KILBY JACK ; KILBY JACK S ; KILBY JACK ST CLAIR ; MCCRADY JOHN ; SCHWEITZER ROBERT F ; ST CLAIR KILBY J

Assignee(s): JACK ST CLAIR KILBY TE DALLAS TEXAS VER ST V AM ; KILBY JACK US

Inventor(s):(std)**:** KILBY JACK S ; MCCRADY JOHN ; SCHWEITZER ROBERT F ; SCHWEITZER ROBERT FRANK ; SCHWEITZER R ; KILBY JACK ST CLAIR ; KILBY C ; CRADY J

Inventor(s): CLAIR KILBY JACK ST ; FRANK SCHWEITZER ROBERT

International class (IPC 8-9): B41J13/00 B41J3/36 G06C7/09 G06F15/02 G06F3/02 G06K15/16 G06K17/00 (Advanced/Invention); B41J13/00 B41J3/36 G06C7/00 G06K15/02 G06K17/00 (Core/Invention)

International class (IPC 1-7): B41J1/20 B41J11/00 B41J3/20 B41J3/36 B41J5/00 G06C11/00 G06F15/02 G06F15/30 G06F3/02 G06K15/00 G06K17/00

CPC: B41J3/36 G06C7/09

European class: B41J3/36 G06C7/09

US class: 235/168 400/486 400/78 400/83 400/88 708/106 708/173

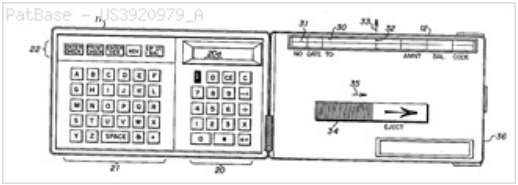
Classification Explorer

Cited documents: US3748452 A, US3739161 A, US3453601 A,

Forward Citations: US9189908, US7826922, US7742996, US6114977, US5758039, US5583783, US5527122, US5372436, US5370466, US5336002, US5299295, US5243550, US5233547, US5059048, US4910696, US4763292, US4751664, US4737911, US4736332, US4724527, US4649491, US4635219, US4628457, US4628193, US4569029, US4527917, US4308588, US4279022, US4224675, US4222109, US4192006, US4106101, US4096577, US4095274, US4086655, US4075702, US3999050, US2014217111, US2008275936, SG93230, JP61276065, JP59149567, JP59149566, JP59083276, JP59083275, JP59083274, JP59083273, JP59083272, JP59083271, FR2344896, EP0748696, DE3130490, DE2942578,

Abstract:

Source: US3920979A A personal check accounting **unit** includes an alphanumeric keyboard for entry of transaction data including an alphabetic portion and a numeric portion. The transaction data is stored and a calculator **unit** responds to the numeric portions to operate thereon to compute balance data. A memory receives and stores the output from the calculator, and print means is actuated in response to entry of the alphanumeric data for printing a verification thereof along with the contents of the memory. In one aspect, a check pack holder is attached to the printer, and an electrical **storage** **unit** in the pack powers the print means to print the quantity of checks in the pack.



476) Family number: 6810821 (US3905362A)

© PatBase

Title: VOLUME-RATE RESPIRATOR SYSTEM AND METHOD

Priority: US19730402677 19731002 US19750545287 19750129

Family:

Publication number	Publication date	Application number	Application date
BR7408167 A	19751007	BR19740008167	19741002
CA1007950 A1	19770405	CA19740209894	19740924
DE2446281 A1	19750430	DE19742446281	19740927
DE2446281 B2	19780105	DE19742446281	19740927
DE2446281 C3	19780907	DE19742446281	19740927
GB1489562 A	19771019	GB19740042473	19741001
JP50078192 A2	19750625	JP19740114275	19741001
JP52030793 B4	19770810	JP19740114275	19741001
JP901183 C3	19780315	JP19740114275	19741001
US3905362 A	19750916	US19730402677	19731002
US4096858 A	19780627	US19760752753	19761220
US4182599 A	19800108	US19750545287	19750129

Probable Assignee: ALLIED HEALTHCARE PRODUCTS INC

Assignee(s):(std)**:** CHEMETRON CORP

Assignee(s): FOOTHILL CAPITAL CORP ; CHEMETRON CORP CHICAGO ILL V ST A ; HATTES NEIL R ; EYRICK THEODORE B ; ALLIED HEALTHCARE PRODUCTS INC ; BANCBOSTON FINANCIAL CO ; BANCBOSTON FINANCIAL CO (THE LENDER) ; BANCBOSTON FINANCIAL CO THE LENDER ; BOATMEN S NATIONAL BANK OF ST LOUIS ; BOATMEN S NATIONAL BANK OF STLOUIS AGENT AS ; BROWN ALLEN C ; BOATMEN'S NATIONAL BANK OF ST LOUIS ; BOATMEN''S NATIONAL BANK OF ST LOUIS ; BOATMEN'S NATIONAL BANK OF STLOUIS AS AGENT ; BOATMEN''S NATIONAL BANK OF STLOUIS AS AGENT ; BOATMEN'S NATIONAL BANK OF STLOUIS AGENT AS

Inventor(s):(std)**:** BROWN A ; EYRICK T ; HATTES N ; HATTES NEIL R ; EYRICK THEODORE B ; BROWN ALLEN C

Inventor(s): B EYRICK THEODORE ; C BROWN ALLEN ; BROWN ALLEN C ACTON ; EYRICK THEODORE B READING ; R HATTES NEIL ; HATTES NEIL R DANVERS

International class (IPC 8-9): A61M16/00 (Advanced/Invention); A61M16/00 (Core/Invention)

International class (IPC 1-7): A61M16/00 F04B17/00 G05D7/06

CPC: A61M16/0072 A61M16/1055 A61M16/107 A61M16/0841 A61M2016/0027 A61M2016/1025 A61M16/0051 A61M16/024 A61M16/0012

European class: A61M16/00 K61M16/00A6D K61M16/00M7

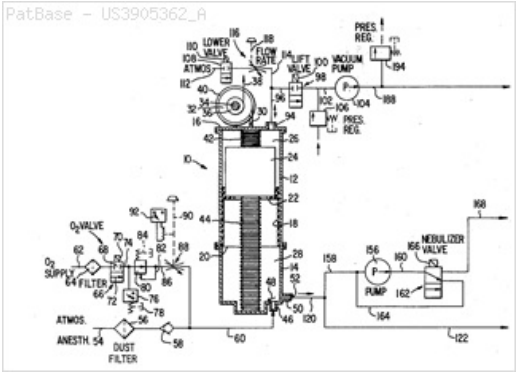
US class: 128/145.6 128/145.8 128/202.22 128/204.18 128/204.21 128/204.23 128/205.16 128/205.19 417/328 417/402 92/5R 92/98D

Classification Explorer

Cited documents: US862867 A, US3754550 A, US3730180 A, US3685925 A, US3604822 A, US3601006 A, US3598505 A, US3307542 A, US3286710 A, US3250226 A, US3242952 A, US3185147 A, US3158152 A, US3095785 A, US3025551 A, US2828694 A, US2789510 A, US2785638 A, US2688514 A, US2681012 A, US1277383 A, US111536 A,

Forward Citations: WO9302730, WO8102677, USRE39225, USRE36745, US9808591, US9795752, US9675774, US9649458, US9498589, US9364624, US9358358, US9227034, US9180271, US9180270, US9151425, US9132250, US9126002, US9050434, US8985099, US8967145, US8955518, US8939152, US8925545, US8844526, US8776793, US8770193, US8683997, US8677999, US8677995, US8672876, US8656913, US8627819, US8573219, US8567399, US8522780, US8418694, US8381729, US8322339, US8302602, US8297279, US8251876, US8231566, US8230859, US8226597, US8156937, US8146592, US8136527, US8075676, US8051854, US7909033, US7722698, US7617826, US7448594, US7293967, US6761166, US6761165, US6726643, US6447240, US6443154, US6325590, US6245033, US6240919, US6152134, US6099235, US6076523, US6073630, US6036664, US5993403, US5957133, US5957130, US5950624, US5884625, US5865173, US5797863, US5728054, US5660171, US5647352, US5628305, US5588957, US5520619, US5507282, US5390666, US5245996, US5161525, US5107831, US5070871, US5065746, US5063925, US4941469, US4838259, US4813409, US4747403, US4622884, US4459982, US4384576, US4340044, US4323064, US4318399, US4287886, US4206754, US4141354, US4098272, US4060078, US4057059, US4036221, US4020834, US3961626, US2011100364, US2011100360, US2011088697, US2010252046, US2010078024, US2010071693, US2009229460, US2009214393, US2009214370, US2009212962, US2009211443, US2009211438, US2009205494, US2009205493, US2009108066, US2008302363, US2008283051, US2008092893, US2008092892, US2008066754, US2008053441, US2008053438, US2008035146, US2007272244, US2007163589, US2007000494, US2007000490, US2006213518, US2006144396, US2004076526, JP54047900, JP52041493, FR2409762, EP2167186, EP1329238, EP0155352, EP0121255, EP0121255, EP0054521, EP0046570, EP0046570, EP0022144, DE4120913, DE4038499, DE3817091,

Abstract:
Source: US3905362A A respiration **unit** for supplying a preselected limited volume of breathing gas to a patient at limited positive pressures, and at a preselected limited flow rate is disclosed. The system includes an air delivery cylinder having a drive weight which is free to move up and down. A diaphragm connected to the weight divides the cylinder into an upper control chamber and a lower delivery chamber. A vacuum source is connected to the control chamber through a first solenoid-controlled valve to regulate the lifting of the weight, and a second solenoid-controlled valve regulates the bleeding of air into the control chamber to release and regulate the rate of fall of the weight, thereby driving breathing gas under pressure out of the lower chamber. A control system regulates the lift and lower cycles of the drive weight to provide the required operation of the system, with various sensors being provided to allow patient control of the system under selected conditions, and to assure patient safety.


PatBase - US3905362_A
PRES. REG.
VACUUM PUMP
LOWER VALVE
ATMOS
FLOW RATE
LIFT VALVE
PRES. REG.
O2 VALVE
O2 SUPPLY
FILTER
ATMOS.
ANESTH.
DUST FILTER
NEBULIZER VALVE
PUMP

477) Family number: 1248311 (US3942676A)

Title: TEAR-**OPEN** **PACKAGING** **CONTAINER**

Priority: DE19732355550 19731107

Family:

Publication number	Publication date	Application number	Application date
BR7409286 A	19760511	BR19740009286	19741106
CH571431 A	19760115	CH19740014395	19741028
DE2355550 A1	19751002	DE19732355550	19731107
ES431691 A1	19760916	ES19740431691	19741106
FR2249811 A1	19750530	FR19740036931	19741107
FR2249811 B3	19770805	FR19740036931	19741107
GB1465128 A	19770223	GB19740047870	19741105
IT1025364 A	19780810	IT19740029011	19741031
JP50073779 A2	19750618	JP19740128501	19741107
NL7414483 A	19750512	NL19740014483	19741106
SE389656 B	19761115	SE19740013936	19741106
SE389656 C	19770224	SE19740013936	19741106
SE7413936 A	19750509	SE19740013936	19741106
US3942676 A	19760309	US19740521187	19741105

Probable Assignee: BOSCH GMBH ROBERT

Assignee(s):(std)**:** BOSCH GMBH ROBERT

Assignee(s): BOSCH GMBH ROBERT DT ; BOSCH R GMBH ; BOSCH ROBERT GMBH ; ROBERT BOSCH G M B H TE STUTTGART BONDSREPUBLIEK DUITSLAND ; ROBERT BOSCH GMBH ; ROBERT BOSCH GMBH TE STUTTGART BONDSREPUBLIEK DUITSLAND ; BOSCH GMBH R

Inventor(s):(std)**:** BECKERS H ; BECKERS HANS ; BONUS H ; BONUS HORST ; BUCHNER NORBERT DR ; KOEHNLEIN ROLF ; TITSCHER KARL HEINZ DR

International class (IPC 8-9): B65D17/50 B65D77/20 (Advanced/Invention); B65D17/00 B65D77/10 (Core/Invention)

International class (IPC 1-7): A23L3/00 B65C B65D15/00 B65D15/16 B65D17/00 B65D17/16 B65D17/20 B65D17/24 B65D41/32 B65D51/22 B65D85/00

CPC: B65D17/4011 B65D77/2056

European class: B65D17/16B1 B65D77/20E1B3B2

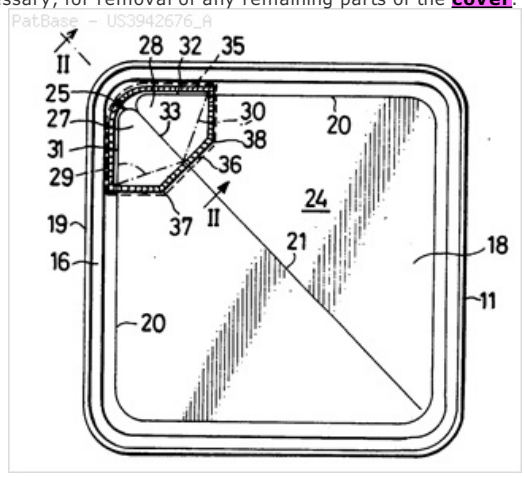
US class: 206/497 220/270 220/359.2 220/359.3 229/123.2 229/125.35

Classification Explorer

Cited documents: US3339788 A, US3159303 A,

Forward Citations: WO14058749, US8397914, US8108998, US7055713, US6843042, US5992674, US5857582, US5516035, US5388757, US5012928, US4557398, US4438850, US2015021380, US2006113287, US2004089664, US2003056475, FR2703331, FR2435406, EP0618149,

Abstract:
Source: US3942676A A lightweight **container** for foodstuffs or the like, formed from a multi-layer composite material, typically a sandwich of metal and synthetic plastic foil. A dish-shaped base member and a **cover** are thermally joined or welded at respective flanges. The **cover** is provided with weakening score lines which define an area which is to be removed by fracturing the **cover** material along the score lines when a **tab**, contiguous with a part of the **cover**, is pulled up. Each partial section of the tear-**open** **cover** has such a **tab** which is intended to be grasped with the fingers of one hand. The **tabs** themselves are not joined to the base member of the **container** and may, in fact, protrude out of the plane of the **cover** when the **container** is **sealed**. The hermetic **seal** in the region of the free-standing **tabs** is assured by a platelet, which may be made of the same material as that from which the **container** is made, but which may have a different composition. This platelet is welded to the inside of the **cover**, substantially congruent with the region of the starting **tabs**. To **open** the **package**, one of the **tabs** is grasped and pulled up, resulting in fracture of the material of the **cover** along the weakening score lines, permitting removal of the associated part of the **cover**. The procedure is then repeated, if necessary, for removal of any remaining parts of the **cover**.



478) Family number: 1534862 (US3889677A)

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Title: SELF-CONTAINED FLUID EVACUATOR

Priority: CA19740212332 19741025 CA19760250179 19760413 GB19740049299 19741114
NL19740015068 19741119 US19730417124 19731119 CA19770287660 19770928
US19760729094 19761004 US19750568205 19750415 US19750587142 19750616

Family:

Publication number	Publication date	Application number	Application date
AU197475454 A1	19760520	AU19740075454	19741118
AU197612999 A1	19771020	AU19760012999	19760414
AU197612999 A1	19771020	AU19760012999	19780414
AU507957 B2	19800306	AU19760012999	19780414
BE822326 A	19750520	BE19740150626	19741118
BE840819 A	19761015	BE19760166224	19760415
CA1060748 A1	19790821	CA19740212332	19741025
CA1092003 A1	19801223	CA19770287660	19770928
CA1101286 A1	19810519	CA19760250179	19760413
CH588868 A	19770615	CH19740015320	19741118
CH597871 A	19780414	CH19760004762	19760414
DE2454746 A1	19750522	DE19742454746	19741119
DE2616346 A1	19761028	DE19762616346	19760414
FR2251342 A1	19750613	FR19740037974	19741118
FR2251342 B1	19831104	FR19740037974	19741118
FR2307989 A1	19761112	FR19760011074	19760414
FR2307989 B1	19830520	FR19760011074	19760414
GB1485279 A	19770908	GB19740049299	19741114
GB1550653 A	19790815	GB19760015524	19760415
JP1022772 C3	19801128	JP19740132637	19741118
JP50084090 A2	19750707	JP19740132637	19741118
JP51136395 A2	19761125	JP19760042296	19760414
JP55015220 B4	19800422	JP19740132637	19741118
NL7415068 A	19750521	NL19740015068	19741119
NL7603867 A	19761019	NL19760003867	19760412
SE412165 B	19800225	SE19740014439	19741118
SE412165 C	19800612	SE19740014439	19741118
SE429006 B	19830808	SE19760004402	19760414
SE429006 C	19831117	SE19760004402	19760414
SE7414439 A	19750520	SE19740014439D	19741118
SE7604402 A	19761016	SE19760004402D	19760414
US3889677 A	19750617	US19730417124	19731119
US3983872 A	19761005	US19750568205	19750415
US4022209 A	19770510	US19750587142	19750616
US4136696 A	19790130	US19760729094	19761004
ZA7407398 A	19751231	ZA19740007398	19741119
ZA7602197 A	19770427	ZA19760002197	19760412

Probable Assignee: INT PAPER CO

Assignee(s):(std)**:** BARD INC ; BARD INC C R ; INT PAPER CO ; INT PAPER CO1031JP48 121758 ; JP48 121759 ; STOCKHOLMS PATENTBYRA412390 AB

Assignee(s): INTERNATIONAL PAPER CY US ; INTERNATIONAL PAPER CY ; INTERNATIONAL PAPER COMPANY TE NEW YORK ; INTPAPER CO ; NEHRING JOHN R ; 731031JP48 121759 ; AB STOCKHOLMS PATENTBYRA412390 ; BARD C R INC ; BARD CR INC ; CRBARD INC ; INTERNATIONAL PAPER CO ; INTERNATIONAL PAPER COMPANY ; C R BARD INC ; INTERNATIONAL PAPER CO1031JP48 121758 ; CR BARD INC ; INT PAPER CY US ; INT PAPER CY ; CRBARD INC A CORP OF NJ ; INT PAPER CO TE NEW YORK

Inventor(s):(std)**:** NEHRING J R ; NEHRING JOHN R ; NEHRING J ; JIYON AARU NEERINGU

Inventor(s): R NEHRING JOHN ; J R NEHRING ; JOHN R NEHRING ; JR NEHRING

Agent(s): GOWLING LAFLEUR HENDERSON LLP

International class (IPC 8-9): A61F6/02 A61H35/00 A61M1/00 A61M27/00 A61M3/02 A61M39/02 (Advanced/Invention); A61F6/00 A61M1/00 A61M3/00 A61M39/02 (Core/Invention)

International class (IPC 1-7): A61G9/00 A61M1/00 A61M1/03 A61M1/08 A61M27/00 B65D F04B43/00 F04B43/06 F04B43/12 F04B9/12 F04F3/00

CPC: A61M2209/082 A61M2209/088 A61M39/02 A61M1/0011 A61M3/0262 A61M1/0058

European class: A61M1/00A5 A61M1/00K A61M3/02D8C A61M39/02

US class: 128/278 604/142 604/911

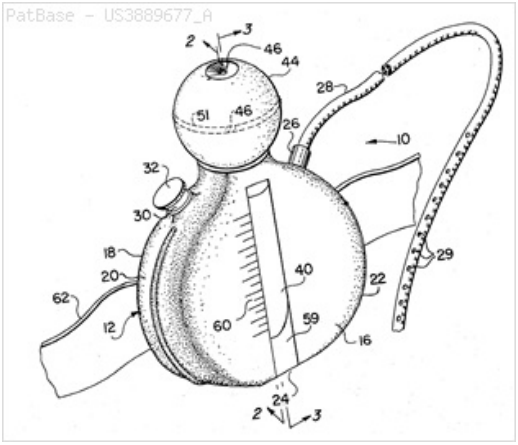
Classification Explorer

Cited documents: US3993069 A, US3983872 A, US3875941 A, US3809086 A, US3745999 A, US3662929 A, US3635607 A, US3592636 A, US3572340 A, US3398743 A, US3291151 A, US3032037 A, US2855933 A, US2074223 A, US1245845 A, JP48065791 A2, FR428409 A, FR2251342 A1, FR2248856 A1, FR2026068 A1, DE35387 A, DE2454746 A1, CH430063 A,

Forward Citations: WO9727829, WO9000908, WO15091072, WO09092380, US9889241, US9844475, US9844474, US9844473, US9808561, US9801984, US9616208, US9597489, US9585990, US9579431, US9545463, US9526817, US9511177, US9492326, US9474654, US9452248, US9452244, US9446178, US9415145, US9414968, US9393353, US9387126, US9375353, US9302034, US9295764, US9289542, US9272080, US9220822, US9211365, US9205235, US9205001, US9199012, US9198801, US9192700, US9155821, US9067003, US9061095, US9058634, US9050399, US9044579, US9044569, US9028458, US9017302, US8945074, US8926592, US8920366, US8882746, US8845619, US8834451, US8829263, US8827983, US8808274, US8808259, US8795243, US8784392, US8777911, US8771259, US8764732, US8758313, US8715256, US8679081, US8663198, US8636721, US8628505, US8569566, US8568386, US8551061, US8551060, US8545464, US8535296, US8529548, US8460255, US8449509, US8398614, US8366692, US8348910, US8337475, US8303552, US8298200, US8282611, US8257328, US8257327, US8257326, US8251979, US8246607, US8246591, US8235971, US8235955, US8216198, US8207392, US8177772, US8177763, US8167869, US8162909, US8162907, US8152785, US8128615, US8118794, US8105295,

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Abstract:
Source: US3889677A A self-contained wound evacuator is disclosed which provides a substantially constant negative gauge pressure and which includes a substantially rigid **container** and an air inflatable member within the **container**, the **container** and inflatable member having a combined configuration which avoids deformation of the inflatable member by the **container** in at least one direction of expansion of the inflatable member. Means are provided for inflating the inflatable member and controlling the deflation thereof.



479) Family number: 17879961 (US4011798A)

Title: METHOD OF MAKING SHIPPING **BAG**

Priority: GB19750041806 19751013 SE19740013152 19741018 US19730419923 19731129
US19750625700 19751024 US19750621598 19751010 US19740473060 19740523

Family:

Publication number	Publication date	Application number	Application date
AT350958 B	19790625	AT19740008809	19741104
AT880974 A	19781115	AT19740008809	19741104
AU197474571 A1	19760429	AU19740074571	19741022
AU197585808 A1	19770421	AU19750085808	19751017
BE822385 A	19750520	BE19740150676	19741119
BE834634 A	19760216	BE19750161046	19751017
BR7503234 A	19760427	BR19750004136	19750522
CA1035741 A1	19780801	CA19740214374	19741121
CA1065753 A1	19791106	CA19750237888	19751017
CH601061 A	19780630	CH19750013513	19751017
CH601069 A	19780630	CH19740015809	19741128
DE2456108 A1	19750612	DE19742456108	19741127
DE2546590 A1	19760429	DE19752546590	19751017
DE2546590 B2	19770317	DE19752546590	19751017
DK138108 B	19780717	DK19740006183	19741128
DK138108 C	19781227	DK19740006183	19741128
DK139420 B	19790219	DK19750004662	19751016
DK139420 C	19790806	DK19750004662	19751016
DK466275 A	19760419	DK19750004662	19751016
DK618374 A	19750728	DK19740006183	19741128
ES226928 U	19770416	ES19740226928U	19741115
ES226928 Y	19770816	ES19740226928U	19741115
ES441881 A1	19770401	ES19750441881	19751017
FI344674 A	19750530	FI19740003446	19741128
FI56352 B	19790928	FI19740003446	19741128
FI56352 C	19800110	FI19740003446	19741128
FI752903 A	19760419	FI19750002903	19751017
FR2252963 A1	19750627	FR19740039090	19741128
FR2252963 B1	19780707	FR19740039090	19741128
FR2334572 A1	19770708	FR19750031490	19751015
FR2334572 B1	19811009	FR19750031490	19751015
GB1486328 A	19770921	GB19740051522	19741128
GB1515858 A	19780628	GB19750041806	19751013
GB1515859 A	19780628	GB19770053695	19751013
IT1023420 A	19780510	IT19740054247	19741127
IT1043350 A	19800220	IT19750028259	19751014
JP50085483 A2	19750710	JP19740137679	19741129
JP51064573 A2	19760604	JP19750124456	19751017
JP53017946 B4	19780612	JP19750124456	19751017
JP941534 C3	19790220	JP19750124456	19751017
LU71379 A	19760906	LU19740071379	19741127
NL7414166 A	19750602	NL19740014166	19741030
NL7512074 A	19760421	NL19750012074	19751014
NL7512074 A1	19760421	NL19750012074	19751014
NO143897 B	19810126	NO19740004302	19741128
NO143897 C	19810506	NO19740004302	19741128
NO744302 A	19750623	NO19740004302	19741128
SE381442 B	19751208	SE19740013152	19741018
SE381442 C	19760318	SE19740013152	19741018
SE409670 B	19790903	SE19740014917	19741128
SE409670 C	19791220	SE19740014917	19741128
SE7413152 A	00000000	SE19740013152	19741018
SE7414917 A	19750530	SE19740014917D	19741128
SU563906 D	19770630	SU19752184859	19751017
SU563906 T	19770630	SU19752184859	19751017
US4011798 A	19770315	US19750625700	19751024
US4087002 A	19780502	US19750625698	19751024
US4129467 A	19781212	US19770789246	19770420

Probable Assignee: SEALED AIR CORP

Assignee(s):(std)**:** AB ZIRISTOR ; AB ZIRISTOR TE LUND ZWEDEN ; PACKAGIN IND INC ; PACKAGING IND INC ; PACKAGING INC ; PACKAGING IND INC LTD ; ZIRISTOR F AB ; PACKAGING INDUSTRIES INC TE HYANNIS MASSACHUSETTS ; PACKAGING INDUSTRIES INC ; ZIRISTOR AB ; A B ZIRISTOR ; AB TSIRISTOR FA

Assignee(s): AB TSIRISTOR FIRMA ; PACKAGING INDUSTRIES INC TE HYANNIS MASSACHUSETTS VER ST V AM ; PACKAGING IND INCLTD ; PACKAGING IND INC US ; PI INC PACKAGING INDUSTIES GROUP INC PI PI INC PACKAGING IND INC AND PACKAGING IND INC CORP LTD ; PACKAGING INDINC ; PHILADELPHIA NATIONAL BANK BROAD AND CHESTNUTS STS ; PI INC ; SENTINEL FOAM AND ENVELOPE CORP ; SEALED AIR CORP ; PACKAGING INDUSTRIES INC US ; PACKAGING INDUSTRIES INC LTD ; PHILADELPHIA NATIONAL BANK ; PI INC PACKAGING INDUSTIES GROUP INC PI PI INC PAC ; SEALED AIR A CORP OF DE CORP ; SEALED AIR A OF DELAWARE CORP ; ZIRISTOR ; PACKAGIN INDUSTRIES INC ; MARINE MIDLAND BUSINESS LOANS INC A CORP ; PACKAGING IND GROUP INC A DE CORP ; BANKERS TRUST CO COLLATERAL AGENT AS ; PACKAGING IND GROUP INC A CORP OF DELAWARE ; KNAUS DENNIS A ; KNUTSSON KENT IE ; PACKAGING IND INC TE HYANNIS MASSACHUSETTS VER ST V AM ; MARINE MIDLAND BUSINESS LOANS INC ; PACKAGING IND ; BAMBARA JOHN D ; BANKERS TRUST CO

Inventor(s):(std): KNAUS D ; KNAUS D A ; KNAUS DENNIS ; KNAUS DENNIS A ; KNAUSS DENNIS A ; KNUTSSON K I ; KNUTSSON K I E ; KNUTSSON KENT INGEMAR ; STRZELEWICZ W ; STRZELEWICZ W B ; STRZELEWICZ WILLIAM B ; STRZELEWIEZ ; STRZLEWICZ W B ; W B STRZELEWICZ ; WILLIAM B STRZELEWICZ ; KNUTSSON KENT INGEMAR EDVARD ; KNUTSSON KENT ; KENTO INGEMAARU EDOBARUDO KUNU ; KENT INGEMAR EDVARD KNUTSSON ; BAMBARA J ; BAMBARA J D ; BAMBARA JOHN D ; BAMBARE J D ; D A KNAUS ; DENNIS A KNAUS ; J D BAMBARA ; JOHN D BAMBARA ; KENT INGEMAR EDVARD KNUTSSON SW ; KNUTSSON KENT I ; KNUTSSON KENT I E

Inventor(s): JOHN D BAMBARA DENNIS A KNAUS WILLIAM B STRZELEWICZ ; KENTO INGEMAARU EDOBARUDO KUNUTOSON ; INGEMAR EDVARD KNUTSSON KENT ; A KNAUS DENNIS ; B STRZELEWICZ WILLIAM ; D BAMBARA JOHN ; KNUTSSON KENT IE

International class (IPC 8-9): B29C61/00 B29C61/02 B29C65/18 B29C65/74 B29C67/00 B29C69/00 B29D22/00 B31B1/90 B31B39/00 B31C3/02 B32B5/18 B65B3/02 B65B41/16 B65B43/04 B65B51/02 B65B51/26 B65D1/02 B65D1/06 B65D1/10 B65D27/00 B65D27/02 B65D27/16 B65D3/18 B65D30/02 B65D30/08 B65D33/18 B65D33/22 B65D8/00 B65D8/18 B65D8/22 (Advanced/Invention);
B29C61/00 B29C65/18 B29C65/74 B29C67/00 B29C69/00 B29D22/00 B31B1/74 B31B39/00 B32B5/18 B65D1/00 B65D1/02 B65D1/06 B65D27/00 B65D3/00 B65D30/02 B65D30/08 B65D33/18 B65D8/00 B65D8/04 (Core/Invention)

International class (IPC 1-7): B29C24/00 B29C27/00 B29C27/02 B29D23/10 B31B1/90 B31B39/00 B31B39/60 B31B41/00 B31C3/02 B32B31/26 B32B5/18 B65B3/02 B65B43/06 B65D1/02 B65D1/06 B65D1/10 B65D1/16 B65D11/00 B65D11/02 B65D11/06 B65D11/20 B65D15/00 B65D17/16 B65D17/20 B65D27/00 B65D29/02 B65D3/12 B65D3/16 B65D30/08 B65D31/02 B65D31/04 B65D33/02 B65D33/02 B65D33/16 B65D39/04 B65D61/00 B65D61/00 B65D65/44 B65D8/00 B65D81/02 B65D81/14 B65D81/14 B65D85/54 B65D85/72

CPC: B29C47/0026 B29C47/0021 B29C66/81419 B29C65/18 B29C66/8362 B29L2009/00 B65D31/02 B65D33/18 B29C47/0023 B29C47/0042 B29C47/0054 B29C47/0057 B29C61/025 B29C67/00 B29C69/00 B29K2105/04 Y10T156/1036 Y10T156/1038 B29C66/727 B29C66/721 B29C66/431 B29C66/71 B29C66/45 B29C65/522 B29C66/1122 B29C66/43 B31B2155/00 B31B2170/20 B29C66/72328 B29C66/72343 B32B29/007 B32B3/02 B32B2266/025 B32B2439/00 B32B2317/122 B32B27/065 B32B1/08 B32B27/302 B32B27/32 B32B2307/31 B32B2439/40 B32B2597/00 B65D11/02 B29C66/83413

European class: B29C61/02B B29C65/18 B29C66/83413 B29C66/8362 B29C67/00 B29C69/00 B31B37/00 B31B39/00 B65D11/02 B65D31/02 B65D33/18 L29C47/00J5 L29C47/00J6 L29C47/00J7 L29C47/00L5 L29C47/00L7 L29C47/00L8 L29K105/04 L29L9/00 L31B237/05

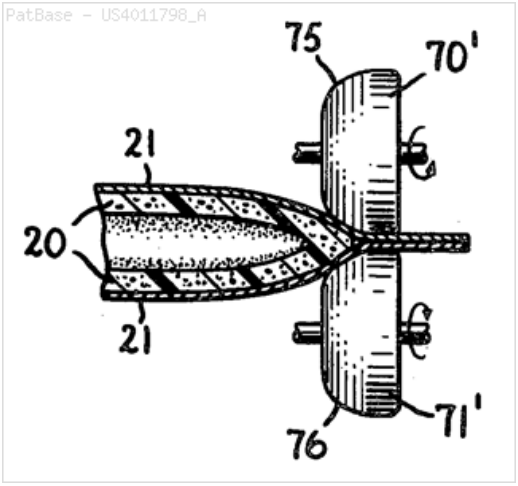
US class: 156/217 156/218 156/84 156/85 156/86 206/523 229/400 383/107 493/205 493/208 493/217 493/240 53/329.2 53/441 53/456 53/470 53/471 53/485

Classification Explorer

Cited documents: US3867874 A, US3811613 A, US3768724 A, US3767496 A, US3595468 A, US3577700 A, US3468467 A, US3460740 A, US3454208 A, US3441192 A, US3441173 A, US3440794 A, US3438824 A, US3317038 A, US3312383 A, US3303603 A, US3256527 A, US3246786 A, US3143278 A, US2989785 A, US2969901 A, US2962158 A, US2859575 A, US2757848 A, US2580712 A, JP48020818 B4, JP48020818 B1, JP47031795 A2, JP46007506 A2, JP44026760 A2, JP41002035 A2, JP40020432 A2, JP37015476 A2, JP35012891 A2, JP35011669 A2,

Forward Citations: WO9740978, WO9412070, WO06041395, USD698393, USD656410, USD595052, USD551760, USD538424, USD534648, US9844911, US9827711, US9808989, US9346612, US9120608, US9016555, US8567660, US8182152, US8075188, US7824321, US7798711, US7708350, US7513397, US7487894, US7476192, US7320661, US7115086, US7108650, US6860843, US6811529, US6790468, US6739370, US6571850, US6428459, US6341473, US6338235, US6298991, US6189692, US6170227, US6139482, US6109440, US6105778, US6063220, US6024220, US6006905, US5697200, US5662420, US5620759, US5566530, US5547075, US5544473, US5503611, US5451437, US5310048, US5081820, US4942963, US4927010, US4884684, US4868025, US4854999, US4846348, US4826475, US4778557, US4704101, US4679688, US4606954, US4557888, US4551125, US4481669, US4361356, US4360193, US4253892, US4241829, US4186845, US2015151259, US2014260094, US2013205721, US2013047560, US2012163737, US2011114714, US2011114713, US2011000918, US2008300120, US2008116101, US2008070771, US2007237433, US2007201774, US2007199855, US2007080573, US2007076988, US2006108385, US2006108374, US2006023973, US2004265521, US2004171469, US2004000581, US2003131946, US2003057113, US2002183181, JP60085934, JP60038142, JP57008657, JP54113814, JP54038949, GB2227709, GB2220882, GB2220882, GB2156268, GB2137158, FR2494226, FR2464820, EP0913338, EP0695518, EP0695518, EP0605787, EP0605787, EP0138545, EP0116355, EP0067305, EP0060963, EP0060963, DE4244363, DE3612136, DE2925440, DE2841817,

Abstract:
Source: US4011798A An improved cushioned shipping **bag** is disclosed, together with a unique method of continuously making the **bags**. The improved **bag** protects objects from being damaged when they are transported, shipped, handled or sent in the mail. A continuous layer of foamed plastic sheet material is positioned on and affixed (laminated) to a continuous layer of relatively thin sheet material. The laminated layers are then folded with the foamed plastic sheet material positioned on the inside; the folded laminated layers are subsequently heat **sealed**, glued or the like together at predetermined positions along the continuous laminate. The cushioned **bag** blanks subsequently are cut from the continuous laminate. In this manner, three sides of each **bag** are **sealed** and one end is left **open** for insertion of the objects to be shipped. The **open** end of the **bag** is provided with a foldable flap which is used to **seal** the **bag** after the objects are placed inside it.



480) Family number: 1345577 (US3884382A)

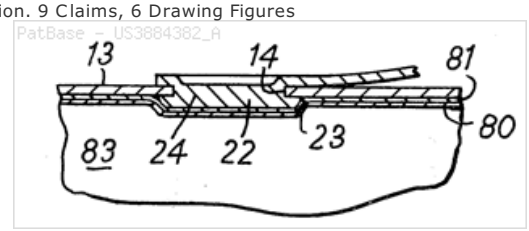
Title:	**CONTAINER CLOSURES**
Priority:	GB19720000696 19720106 GB19730000696 19730209

Family:

Publication number	Publication date	Application number	Application date
CA974934 A1	19750923	CA19730160598	19730104
GB1407601 A	19750924	GB19720000696	19720106
US3884382 A	19750520	US19730320897	19730104

Probable Assignee:	METAL BOX CO LTD
Assignee(s):(std)**:**	METAL BOX CO LTD
Assignee(s):	METAL BOX CO THE LTD ; METAL BOX COMPANY LIMITED THE ; METAL BOX LTD ; THE METAL BOX COMPANY LIMITED ; BALL MARTIN F
Inventor(s):(std)**:**	BALL MARTIN F ; BALL MARTIN FRANK
International class (IPC 8-9):	B65D17/50 B65D33/00 (Advanced/Invention); B65D17/00 B65D33/00 (Core/Invention)
International class (IPC 1-7):	B65D17/06 B65D31/00 B65D33/00 B65D39/16 B65D51/20
CPC:	B65D17/503 B65D17/506 B65D2517/0013 B65D2517/5032 B65D2517/5081
European class:	B65D17/50A2 B65D17/50B L65D517/00Y2B L65D517/50M10B L65D517/50Q1B
US class:	220/272 413/14 53/412 53/478 53/489
Classification Explorer	
Cited documents:	US3441167 A, US3338462 A,
Forward Citations:	WO9854058, WO9213766, WO8902853, WO05108234, WO05108234, USRE32927, US7735673, US7152753, US5667349, US5297375, US5125212, US5059360, US5054641, US5016775, US4846374, US4828138, US4804104, US4793510, US4733793, US4574975, US4416576, US4228633, US4004530, US2017129644, US2005236411, FR2763884, EP0336438, EP0336438, EP0070160,

Abstract:
Source: US3884382A An easy **opening** **container** member such as a can end, especially for a **container** containing pressurised products, comprises a wall having an orifice closed by a plug which is an integral part of a plastic pull **tab**; the free end of the plug is upset to form a rivet head which secures the pull **tab** to the wall and closes the orifice, whilst a layer of metal foil **covers** and is bonded to the back of the wall and the rivet head, preferably by a heat **sealable** adhesive. In manufacture of the **container** member, the plug is inserted and the foil laid on, and pressure, with heat if necessary, is applied so as to form the rivet head and bond the foil layer to the other components in one operation. 9 Claims, 6 Drawing Figures



481) Family number: 1239428 (US4093069A)

Title: **Package** for a stack of sheet materials

Priority: GB19730056848 19731207 US19740530028 19741204

Family:

Publication number	Publication date	Application number	Application date
BE822912 A	19750604	BE19741006308	19741204
CA1062209 A1	19790911	CA19740215129	19741203
DE2456702 A1	19750612	DE19742456702	19741130
FR2253671 A1	19750704	FR19740039585	19741202
FR2253671 B1	19781027	FR19740039585	19741202
GB1488000 A	19771005	GB19730056848	19731207
IT1023384 A	19780510	IT19740054203	19741125
JP1174740 C3	19831028	JP19740141251	19741206
JP50091496 A2	19750722	JP19740141251	19741206
JP58010306 B4	19830225	JP19740141251	19741206
US4093069 A	19780606	US19760674150	19760406

Probable Assignee: AGFA GEVAERT NV

Assignee(s):(std)**:** AGFA GEVAERT ; AGFA GEVAERT AG ; AGFA GEVAERT NV

Assignee(s): SMOLDEREN ALBERT E ; AGFA GEVAERT BE ; AGFA GEVAERT N V ; AGFA GEVAERT NAAMLOZE VENNOOTSCHAP

Inventor(s):(std)**:** SMOLDEREN A E ; SMOLDEREN ALBERT E ; SMOLDEREN ALBERT EMIEL

Inventor(s): ARUBEERU EMIIRU SUMORUDERAN ; EMIEL SMOLDEREN ALBERT

International class (IPC 8-9): B65B25/14 B65D65/16 B65D65/28 B65D71/00 B65D75/28 B65D75/64 B65D81/00 G03C3/00 (Advanced/Invention);
B65B25/14 B65D65/22 B65D71/00 B65D75/52 B65D81/00 G03C3/00 (Core/Invention)

International class (IPC 1-7): B03C B65B11/50 B65B25/14 B65B35/50 B65B51/14 B65B63/02 B65B65/02 B65D65/16 B65D65/24 B65D65/28 B65D75/00 B65D75/28 B65D75/64 B65D85/00 B65D85/54

CPC: B65B25/14 B65D81/00 B65D71/00

European class: B65B25/14 B65D71/00 B65D81/00

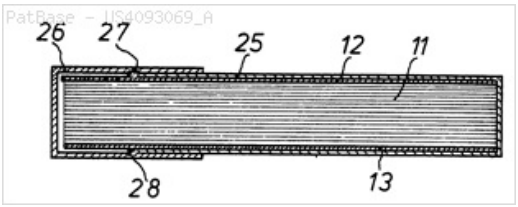
US class: 206/455 229/235 229/87.05

Classification Explorer

Cited documents: US3443093 A, US2327713 A, US2296951 A,

Forward Citations: WO9002358, US8156715, US8038827, US6872044, US5390793, US5139148, US5103972, US5048262, US5029709, US4909389, US4778059, US4340288, US2008061120, US2005202191, US2005199686, US2003075030, US2003041712, JP63305352, DE2803050, DE2730880, DE2632041,

Abstract:
Source: US4093069A A **package** for **packaging** a stack of articles in sheet form comprises at least two strips which are overlappingly **sealed** to each other, so forming a loosely overlying edge which greatly facilitates **opening** of the **package**. The whole may be provided with protective sheets at both sides of the stack, whereby said protective sheets may have a row of perforations at the edge of the composing strips so that the first sheet of the stack may easily be taken from the stack after removing part of the protective sheets.



482) Family number: 6633277 (US4003490A)

Title: Process and apparatus for the manufacture of white cheese or yoghurt

Priority: FR19740000718 19740109 FR19740012664 19740410 SE19740015116 19741203 US19760702609 19760706 US19740535843 19741223

Family:

Publication number	Publication date	Application number	Application date
AT352513 B	19790925	AT19750000090	19750108
AT9075 A	19790215	AT19750000090	19750108
BE822974 A	19750605	BE19742054015	19741205
BR7410608 A0	19750902	BR19740010608	19741219
CA1053501 A1	19790501	CA19750217261	19750102
CH597767 A	19780414	CH19750000150	19750108
DE2500224 A1	19750717	DE19752500224	19750104
DK632374 A	19750825	DK19740006323	19741205
ES433556 A1	19770816	ES19750433556	19750103
ES433556 A2	19770916	ES19750433556	19750103
FR2267031 A2	19751107	FR19740012664	19740410
FR2267031 B2	19790720	FR19740012664	19740410
FR2275144 A1	19760116	FR19740000718	19740109
FR2275144 B1	19781027	FR19740000718	19740109
FR2293144 A2	19760702	FR19750037022	19751203
FR2293144 B2	19781229	FR19750037022	19751203
GB1458760 A	19761215	GB19740055744	19741224
IT1028000 A	19781220	IT19740030962	19741223
JP50100259 A2	19750808	JP19750004708	19750109
NL7500275 A	19750711	NL19750000275	19750109
SE413975 B	19800707	SE19740015116	19741203
SE413975 C	19801023	SE19740015116	19741203
SE7415116 A	19750710	SE19740015116D	19741203
US4003490 A	19770118	US19740535843	19741223
US4058630 A	19771115	US19760702609	19760706

Probable Assignee: TOSCARA ANSTALT

Assignee(s):(std)**:** DSO MLECHNA PROMISHLENOST ; TOSCARA ANSTALT

Assignee(s): TOSCARA ANSTALT FR ; TOSCARA ANSTALT TE VADUZ LIECHTENSTEIN ; TOSCARA ANSTALT SOC ; DSO MLETSCHNA PROMISCHLENOST ; SOCIETE DITE TOSCARA ANSTALT ; SOCIETE TOSCARA ANSTALT ; CORBIC BERNADETTE

Inventor(s):(std)**:** BUSNEL B G ; CORBIC B G ; CORBIC BERNADETTE ; CORBIC EPOUSE ; CORBIC BERNADETTE NEE BUSNEL ; CORBIC B ; BUSNEL BERNADETTE GEORGETTE ; CORBIC NEE BUSNEL BERNADETTE C ; CORBIC NEE BUSNEL BERNADETTE ; BUSNEL B CONIUGATA COMBIO

Inventor(s): B G BUSNEL ; BG BUSNEL ; BERNADETTE GEORGETTE BUSNEL ; B CORBIC ; EPOUSE CORBIC ; CORBIC NEE BUSNEL BERNADETTE CORBIC

International class (IPC 8-9): A01J25/00 A01J25/11 A23C19/02 A23C19/076 A23C9/00 A23C9/12 B65D25/04 B65D81/26 B65D85/00 B65D85/76 (Advanced/Invention);
A01J25/00 A23C19/00 A23C9/00 A23C9/12 B65D25/04 B65D81/26 B65D85/72 (Core/Invention)

International class (IPC 1-7): A01J25/06 A01J25/11 A01J25/12 A23C19/02 A23C23/00 A23C9/12 B01D43/00 B65D85/00 B65D85/76

CPC: A01J25/115 A01J25/117 A23C9/1226 B65D81/262 A01J25/004 A23C19/076 B65D25/04 B65D85/76

European class: A01J25/00C A01J25/11B A01J25/11C A23C19/076 A23C9/12D4 B65D25/04 B65D81/26C1 B65D85/76

US class: 210/514 210/521 220/22.3 220/532 426/130 426/34 426/36 426/394 426/43 426/478 426/491 99/452 99/456

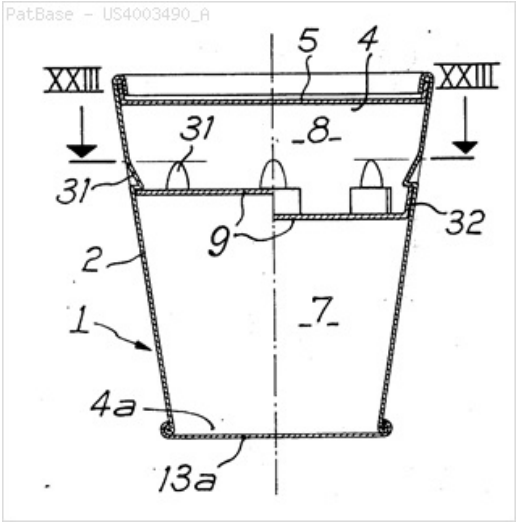
Classification Explorer

Cited documents: US621711 A, US3485412 A, US3360161 A, US3179915 A, US2529114 A, US2486932 A, US2067830 A,

Forward Citations: WO9936322, WO8401261, WO17217090, WO17096410, WO12136687, WO05092718, US9604749, US8919600, US7628284, US7487881, US5378479, US5373779, US5356638, US4664922, US4628805, US4568554, US4318935, US4298618, US4225623, US4194011, US2014004233, US2009108005, US2008220135, US2007026127, US2006062885, US2006032851, US2005158433, US2004200845, US2004200844, NL1008035, JP5784713, JP2013526285, FR2749567, FR2736898, FR2533411, FR2465645, FR2456467, FR2416646, ES2572732, EP2514687, EP0002037, EA024950, DE102005035499, CN103547513,

Abstract:
Source: US4003490A This invention relates to the manufacture of white cheese or yoghurt. In accordance with the invention, a coagulatable milk composition is coagulated in one chamber of a **container** having two intercommunicating chambers. After coagulation of the milk composition, the orientation of the **container** is changed so that serum liberated during the coagulation in one chamber drains from the curds into the other chamber. The curds are prevented from passing from one chamber to the other by a divider which serves to define the two chambers and provide communication passages between the chambers. The present invention enables white cheese or yoghurt to be formed in the **container** from which it is to be consumed, without necessitating handling of pre-formed white cheese or yoghurt during **packaging**.

PatBase - US4003490_A



483) Family number: 1190474 (US3915787A)

Title: EDGE CAPPING AND FOLDING ATTACHMENT FOR **BAG** MACHINES

Priority: US19740461276 19740416

Family:

Publication number	Publication date	Application number	Application date
BE826046 A	19750616	BE19750153796	19750227
CA1011145 A1	19770531	CA19750217298	19750103
DE2515053 A1	19751106	DE19752515053	19750407
DE2515053 B2	19770922	DE19752515053	19750407
DE2515053 C3	19780524	DE19752515053	19750407
FR2267881 A1	19751114	FR19750005349	19750220
GB1475007 A	19770601	GB19740054528	19741217
JP50137270 A2	19751031	JP19750019954	19750219
JP53034551 B4	19780921	JP19750019954	19750219
US3915787 A	19751028	US19740461276	19740416

Probable Assignee: UNIFLEX

Assignee(s):(std)**:** UNIFLEX

Assignee(s): UNIFLEX INC ; UNIFLEX INC US ; UNIFLEX INC WESTBURY N Y V ST A ; VETTER ERICH

Inventor(s):(std)**:** VETTER E ; VETTER ERICH

Inventor(s): VETTER ERICH HUNTINGTON NY VSTA ; VETTER ERICH HUNTINGTON N Y V ST A ; E VETTER

International class (IPC 8-9): B31B1/36 B31B1/86 B31B19/86 B31B19/90 B31B23/00 B31F1/00 (Advanced/Invention); B31B1/00 B31B1/74 B31B19/00 B31B23/00 B31F1/00 (Core/Invention)

International class (IPC 1-7): B31B1/86 B31B19/26 B31B21/00 B31B23/00 B31B23/26 B32B31/00

CPC: B31F1/0029 B31B70/00 B31B70/36 B31B70/8123 B31B70/876 B31B2155/00 B31B2160/10

European class: B31B1/36 B31B19/86 B31B19/90 B31B23/00 B31F1/00A2B8C L31B201/26B L31B219/90B3 L31B219/90K4 L31B237/10

US class: 156/359 156/461 156/467 493/390 493/394

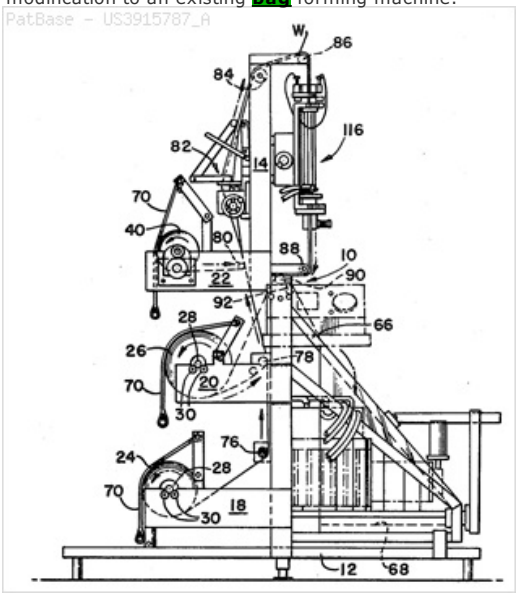
Classification Explorer

Cited documents: US3779139 A, US3749631 A, US3488244 A, US3458965 A, US3431561 A, US3381592 A, US3058402 A, US2237537 A, JPS4735870, JP47035870 A2, JP46012270 A2,

Forward Citations: WO17079772, US6592699, US5755655, EP0371314, EP0371314, DE19513688, CN103434187, CN103434187,

Abstract:

Source: US3915787A A **bag** machine attachment by which opposite edges of a web of heat **sealable** material are hemmed or capped prior to longitudinal folding and feeding the web to a conventional **bag** machine. The attachment includes an upstanding frame to support supply rolls of web material folding and heat **sealing** components as well as adjustment and control means by which a wide range of **bag** mouth edge structures may be formed without modification to an existing **bag** forming machine.



484) Family number: 1170561 (GB1475080A)

Title: HERMETICALLY **SEALED** FLEXIBLE **PACKAGE**

Priority: AU19740076382 19741213 GB19730058410 19731217

Family:

Publication number	Publication date	Application number	Application date
AR204554 A1	19760212	AR19740256954	19740101
AU197476382 A1	19760617	AU19740076382	19741213
BR7410532 A0	19750902	BR19740010532	19741217
CA1014490 A1	19770726	CA19740216264	19741217
CH589547 A	19770715	CH19740016744	19741217
DE2459050 A1	19750703	DE19742459050	19741213
DK143790 B	19811012	DK19740006543	19741216
DK143790 C	19820329	DK19740006543	19741216
DK654374 A	19750901	DK19740006543	19741216
ES432998 A1	19770301	ES19740432998	19741217
ES451141 A1	19770816	ES19760451141	19760901
FR2254491 A1	19750711	FR19740041606	19741217
FR2254491 B1	19780623	FR19740041606	19741217
GB1475080 A	19770601	GB19730058410	19731217
IL46246 A0	19750313	IL19740046246	19741215
IL46246 A1	19780430	IL19740046246	19741215
IN143753 A	19780128	IN1974CA02753	19741216
IT1027743 A	19781220	IT19740030647	19741217
JP50095094 A2	19750729	JP19740144938	19741217
NL157269 B	19780717	NL19740016439	19741217
NL7416439 A	19750619	NL19740016439	19741217
SE418600 B	19810615	SE19740015560	19741211
SE418600 C	19810924	SE19740015560	19741211
SE7415560 A	19750618	SE19740015560D	19741211
ZA7407889 A	19751231	ZA19740007889	19741211

Probable Assignee: KON EMBALLAGE IND VAN LEER BV

Assignee(s):(std)**:** KON EMBALLAGE IND VAN LEER BV ; LEER KONINKLL EMBALLAGE ; LEER KONINKLIJKE EMBALLAGE

Assignee(s): VAN LEER KONINKLL EMBALLAGE INDUSTRIE BV ; VAN LEER KONINKLIJKE EMBALLAGE INDUSTRIE BV ; TURNER PETER G ; EMBALLAGE INDUSTRIE VAN LEER BV KONINKLL ; EVANS ALBERT EJ ; KONINKLIJKE EMBALLAGE IND VAN LE ; KONINKLIJKE EMBALLAGE IND VAN LEER BV ; KONINKLIJKE EMBALLAGE IND VAN LE NL ; KONINKLIJKE EMBALLAGE INDUSTRIE VAN LEER B V ; KONINKLIJKE EMBALLAGE INDUSTRIE VAN LEER BV ; KONINKUIJKE EMBALLAGE IND VAN LEER ; KONINKLIJKE EMBALLAGE INDUSTRIE VAN LEER B V AMSTELVEEN ; KONINKLIJKE EMBALLAGE INDUSTRIE VAN LEER B V TE AMSTELVEEN ; KONINKLUKE EMBALLAGE INDUSTRIE VANLEER BV

Inventor(s):(std)**:** EVANS A ; EVANS ALBERT E J ; EVANS ALBERT EDWARD JOHN ; TURNER P ; TURNER PETER G ; TURNER PETER GATENBY ; TURNER P G ; LOZZI PETER GATENBY TURNER ; EVANS A E J

Inventor(s): A E J EVANS ; ALBERT EDWARD JOHN EVANS ; ALBERT EDWARD JOHN EVANS AND PETER GATENBY TURNER ; P G TURNER ; EVANS ALBERT EJ ; JOHN EVANS ALBERT EDWARD ; PETER GATENBY TURNER ; TURNER LOZZI PETER GATENBY

Agent(s): SIMON LAVIE

International class (IPC 8-9): B65D75/26 B65D75/30 B65D75/60 B65D81/24 (Advanced/Invention);
B65D75/26 B65D81/24 (Advanced/Non-invention);
B65D75/26 B65D75/28 B65D75/52 B65D81/24 (Core/Invention)

International class (IPC 1-7): A45D37/00 B23K1/12 B65B51/00 B65B9/00 B65D27/16 B65D29/02 B65D31/00 B65D33/16 B65D35/10 B65D65/26 B65D65/38 B65D65/40 B65D7/12 B65D75/14 B65D75/28 B65D75/30 B65D75/58 B65D81/18 B65D83/06

CPC: B65D75/30

European class: B65D75/30

Classification Explorer

Forward Citations: WO16167971, US9601161, US7631764, US7434692, US7357255, US4986429, GB2248599, GB2121598,

Abstract:
Source: GB1475080A 1475080 Seaming KONINKLIJKE EMBALLAGE INDUSTRIE VAN LEER BV 17 Dec 1974 [17 Dec 1973] 58410/73 Heading B5K [Also in Divisions B3 and B8] A flexible impermeable **package** comprises two plies of or including a pore free metal foil, coated along at least the edge areas with a solder, the edge areas being **sealed** together by local application of heat and pressure to effect a metal **seal**. These may be a plastics **seal** on the inside and/or outside of the metal **seal** by the facing surfaces of the layers also being coated with a heat **sealable** thermoplastics material. Copper, aluminium, or tin plated steel foils may be used. The solder may be tin, tin-lead, indium or indium tin and may be applied by electroplating or tinning. The heat **sealable** material may be a vinyl lacquer. The metal foil may be laminated to an outer polyester film. The **seal**(s) is/are made by compressing the surfaces between two narrow tapes of resistance wire, the pressure being maintained after termination of the heating till the joint(s) have solidified. A dessicant strip of filter paper saturated with cobaltous chloride may be applied to the foil and be enclosed within plastics **seals** of the **package**. In test examples **packages** were formed by **sealing** two foils together along their periphery, cutting the **sealed** foils in half to form two sachets, inserting helium or a water indicator in to the sachets and **sealing** the sachets.

PatBase – GB1475080_A

1 475 080 COMPLETE SPECIFICATION
2 SHEETS This drawing is a reproduction of the Original on a reduced scale.
SHEET 1

fig. 1

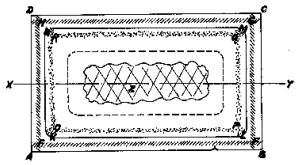


fig. 2

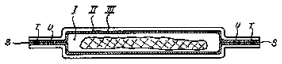


fig. 3

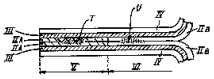


fig. 4



485) Family number: 8590303 (US4008823A)

Title: CONTAINER WITH ATTACHED PULL TAB OPENER

Priority: FR19740039902 19741205 US19730422265 19731206 US19760744196 19761122 US19750603590 19750811 US19800120671 19800211 US19780940354 19780907

Family:

Publication number	Publication date	Application number	Application date
CA1043282 A1	19781128	CA19740214255	19741120
DE2454656 A1	19750619	DE19742454656	19741118
FR2253677 A1	19750704	FR19740039902	19741205
FR2253677 B3	19770902	FR19740039902	19741205
JP51059592 A2	19760524	JP19740133216	19741121
US4008823 A	19770222	US19750603590	19750811
US4234099 A	19801118	US19780940354	19780907
US4339053 A	19820713	US19800120671	19800211

Probable Assignee: TARRO RICHARD

Assignee(s):(std)**:** RICHAADO II TARO ; TARRO RICHARD ; TARRO RICHARD E

Assignee(s): TARRO RICHARD US

Inventor(s):(std)**:** TARRO RICHARD E ; RICHAADO II TARO

Inventor(s): E TARRO RICHARD

International class (IPC 8-9): B65D17/00 B65D17/28 B65D17/32 B65D17/34 B65D17/347 B65D17/353 B65D41/32 B65D55/02 (Advanced/Invention);
B65D17/00 B65D17/28 B65D41/32 B65D55/02 (Core/Invention)

International class (IPC 1-7): B65D17/00 B65D17/16 B65D17/24 B65D17/32 B65D17/34 B65D41/32 B65D43/18

CPC: Y10S206/807 B65D17/4012 B65D17/4014 B65D55/02

European class: B65D17/16B2 B65D17/16B2B B65D55/02

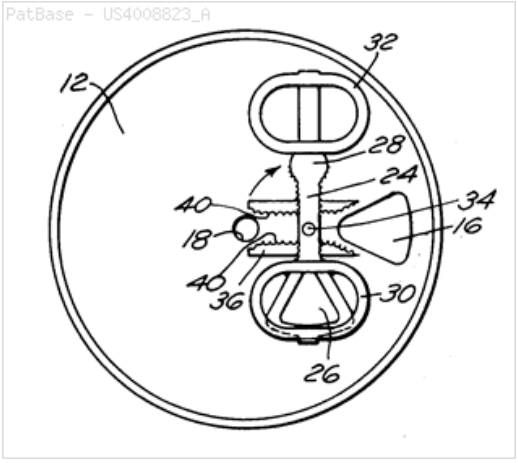
US class: 206/807 220/269 220/270 220/821

Classification Explorer

Cited documents: US3966079 A, US3923198 A, US3908856 A, US3847300 A, US3813000 A, US3783996 A, US3731836 A, US3441167 A, US3366269 A, US3204805 A,

Forward Citations: WO9849066, WO9812118, WO9812118, WO9729019, WO9729019, WO9110600, WO8403080, WO8204026, WO02081322, WO0035761, USD582274, USD582273, USD533452, USD532691, USD532298, USD530610, USD513452, USD509426, USD451054, US9517866, US9463910, US9315290, US9051081, US8640905, US8622238, US8573432, US8397935, US8215513, US7757889, US6830721, US6626314, US6510971, US6220470, US6158608, US6062414, US5285924, US5117980, US5035343, US5031264, US4988013, US4957216, US4842159, US4834258, US4735334, US4705186, US4537326, US4473168, US4442950, US4433792, US4367822, US4207991, US2011056946, US2003102338, RU2638502, JP5916703, JP55143248, JP2013523548, GB2156772, FR2762827, FR2687983, FR2687982, EP0934204, EP0558422, EP0513401, DE3303425, DE19542193,

Abstract:
Source: US4008823A A container having a pull tab secured to a scored removable section. A pivot member, metal or plastic, is pivotally riveted at one end to the container top. The other end of the member overlies the removable section inner and is attached to it by riveting, welding or gluing. When the pull tab is used to tear the removable section from the top, it remains attached to the pivot member and can be swung to one side to permit pouring or drinking from the opening. In a resealable container having a central air opening and a peripheral pouring opening, a plastic closure extends over and is bonded to the scored portions of both openings. The plastic closure is pivotally riveted to the top between the openings and is provided with a pull tab at each end. When the tabs are pulled toward each other both openings will be opened and the closure can be pivoted at right angles to expose them for pouring. The closure can then be swung back over the openings and pressed in to close them again. A seal may be provided to indicate that the container has been opened and resealed. This resealable construction can also be used with a single opening.



486) Family number: 1148501 (US3891089A)

Title:	PEELABLE HEAT **SEALS** FOR **PACKAGES**
Priority:	US19720276941 19720801

Family:

Publication number	Publication date	Application number	Application date
CA986062 A1	19760323	CA19730165109	19730302
US3891089 A	19750624	US19720276941	19720801

Probable Assignee:	REXHAM CORP
Assignee(s):(std):	REXHAM CORP
Assignee(s):	ROUNSAVILLE DAVID L ; GOODWIN CHARLES C ; GRIMM JAMES H ; HRF PACKAGING CORP ; HRF PACKAGING CORP A CORP OF DE
Inventor(s):(std):	GOODWIN CHARLES C ; GRIMM JAMES H ; ROUNSAVILLE DAVID L
International class (IPC 8-9):	B65D65/38 B65D81/20 (Advanced/Invention); B65D65/38 B65D81/20 (Core/Invention)
International class (IPC 1-7):	B65D65/38 B65D81/20
CPC:	Y10T428/24777 B65D65/38 Y10T428/31906 Y10T428/31928
European class:	B65D65/38
US class:	206/439 428/192 428/220 428/514 428/520
Classification Explorer	
Cited documents:	US3796696 A, US3647485 A, US3627611 A, US3604616 A, US3595465 A, US3560324 A, US3560227 A, US3516975 A, US3491935 A, US3217811 A,
Forward Citations:	WO13170199, US9744506, US8828654, US8784745, US8765367, US8735055, US8491178, US8480976, US8052929, US8048375, US7780336, US7767447, US5976299, US5830547, US4714595, US4606951, US4470240, US4317321, US4270965, US4168779, US4160852, US3938659, US2011127188, US2010159167, JP2015517441, EP2847085, DE2900262, DE102009006470, DE102009006470, CN104364166, CN104364166,

Abstract:
Source: US3891089A Methods and compositions are disclosed for providing a **sealed** non-leaking, non-contaminating flexible **package** for articles to be subsequently used, with the **package** being comprised of at least one uncoated layer of paper and one layer of a material other than paper, and with the **seal** for the **package** being readily peelable, substantially in the absence of any destruction of the matrix of the layers previously joined by the **seal**. The above is achieved by heat **sealing** said paper layer to a film of ethylene-vinyl acetate copolymer, having a content of vinyl acetate within the range of between about 9 and 28 percent. The ethylene-vinyl acetate copolymer film may be a self-sustaining film layer or may be laminated to one or more different backing or supporting layers prior to heat **sealing** to the paper.

487) Family number: 1520961 (US3892351A)

Title: **CONTAINER** SUBASSEMBLY HAVING A MEMBRANE-TYPE **CLOSURE**

Priority: CA19750231277 19750711 CA19780300648 19780407 CA19780300649 19780407
US19750565903 19750407 US19750565902 19750407 US19740488101 19740712

Family:

Publication number	Publication date	Application number	Application date
AU197582756 A1	19770106	AU19750082756	19750704
CA1043292 A1	19781128	CA19750231277	19750711
CA1061754 A1	19790904	CA19780300649	19780407
CA1061754 A2	19790904	CA19780300649	19780407
CA1063550 A1	19791002	CA19780300648	19780407
CA1063550 A2	19791002	CA19780300648	19780407
DE2530240 A1	19760129	DE19752530240	19750707
ES439351 A1	19771016	ES19750439351	19750711
GB1507334 A	19780412	GB19750029262	19750711
US3892351 A	19750701	US19740488101	19740712
US3973719 A	19760810	US19750565902	19750407
US3988185 A	19761026	US19750565903	19750407

Probable Assignee: PROCTER AND GAMBLE

Assignee(s):(std)**:** PROCTER AND GAMBLE

Assignee(s): PROCTER AND GAMBLE CO ; PROCTER AND GAMBLE CO THE ; PROCTER AND GAMBLE COMPANY THE ; STUARD CHARLES D ; THE PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY ; JOHNSON CHARLES L

Inventor(s):(std)**:** JOHNSON CHARLES L ; JOHNSON CHARLES LOUIS ; STUARD CHARLES ; STUARD CHARLES D ; STUARD CHARLES DONALD

Inventor(s): LOUIS JOHNSON CHARLES ; CHARLES DONALD STUARD ; CHARLES LOUIS JOHNSON ; DONALD STUARD CHARLES

International class (IPC 8-9): B23K13/02 B31B1/66 B31B50/66 B65B51/10 B65B51/22 B65B53/02 B65B7/28 B65D3/04 B65D3/10 B65D3/12 B65D3/26 B65D3/28 B65D41/00 B65D43/00 B65D5/64 B65D51/00 B65D77/20 B65D77/30 (Advanced/Invention);
B23K13/00 B31B1/60 B65B51/10 B65B51/22 B65B53/00 B65B7/28 B65D3/00 B65D43/00 B65D5/64 B65D51/00 B65D77/10 B65D77/22 (Core/Invention);
B65D (Subclass/Invention)

International class (IPC 1-7): A61K31/23 B23K13/02 B29C27/00 B31B1/66 B65B51/10 B65B51/22 B65B53/02 B65B7/28 B65D15/08 B65D15/24 B65D3/04 B65D3/10 B65D3/12 B65D3/26 B65D3/28 B65D43/00 B65D5/64 B65D51/00 B65D7/04 B65D77/20 B65D77/30

CPC: B65D3/22 B65D51/20 B65D15/08

European class: B65D3/22 B65D51/20

US class: 156/272.4 156/69 206/508 215/251 215/341 219/604 220/258.2 220/359.4 229/123.1 229/125.05 229/125.25 229/43 229/5.5 229/5.6 53/420 53/478

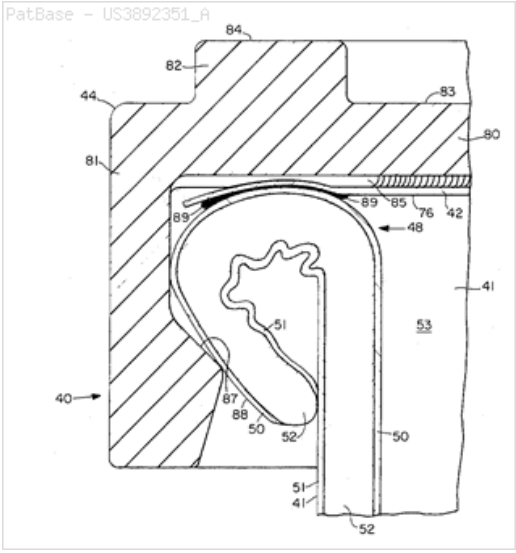
Classification Explorer

Cited documents: US3909326 A, US3844439 A, US3805993 A, US3767076 A, US3723212 A, US3549440 A, US3525454 A, US3471992 A, US3460310 A, US3434651 A, US3367808 A, US2937481 A,

Forward Citations: WO11146087, WO08035314, WO06000532, WO03043889, WO02102670, USRE33886, USD798739, USD718532, USD696593, USD654378, USD630093, USD573401, USD568094, USD567573, USD545674, USD535877, USD519783, USD509993, USD466810, USD460665, USD456245, USD449982, USD424378, US9783337, US9499299, US9334082, US9242782, US9242768, US9132947, US9102448, US8998027, US8939695, US8919613, US8777046, US8650839, US8522991, US8490804, US8468782, US8453856, US8413830, US8397913, US8348079, US8251236, US8100277, US7954640, US7933443, US7832580, US7830263, US7828197, US7780024, US7766183, US7593563, US7588525, US7516595, US7228979, US7165306, US6908001, US6881286, US6725630, US6558306, US6544613, US6523713, US6510981, US6471122, US6471083, US6460759, US6355286, US6349866, US6264098, US6196451, US6196450, US6073809, US6047878, US6032823, US5979748, US5927530, US5915601, US5862953, US5797509, US5560989, US5454896, US5429702, US5416303, US5367856, US5340421, US5226281, US5209795, US5158370, US5145065, US5123573, US5098201, US5013878, US5012946, US4938818, US4919742, US4895457, US4890758, US4856674, US4834259, US4822326, US4771938, US4771151, US4754890, US4689099, US4683016, US4659415, US4640435, US4637519, US4589568, US4442971, US4376506, US4359169, US4341498, US4324343, US4305524, US4299350, US4280653, US4258529, US4252585, US4237360, US4222974, US4217156, US4196841, US4171084, US4165011, US4154360, US4141463, US4094460, US4081106, US4066182, US4044941, US2015183626, US2015034643, US2012074015, US2011248049, US2011210122, US2011204015, US2011049154, US2011017736, US2010327483, US2010320168, US2010279040, US2010276476, US2010264145, US2010195940, US2010170898, US2010072205, US2010028511, US2009272744, US2009250464, US2009212060, US2009173007, US2009110777, US2009090721, US2009003735, US2008283484, US2008237236, US2008190880, US2008105644, US2008092485, US2008017646, US2007164095, US2007090110, US2007080164, US2006175361, US2006124646, US2006119000, US2006065132, US2006060584, US2006057315, US2006054584, US2006037966, US2005247712, US2005139570, US2005115965, US2005082304, US2005082300, US2005069612, US2005058753, US2005058749, US2005003056, US2004247749, US2004146618, US2004142133, US2004104513, US2004099630, US2003057176, US2002190111, US2002117500, US2002107127, US2002014523, JP7329929, GB2432153, GB2432153, GB2415426, GB2141095, EP2746187, EP1643855, EP1103471, EP1092648, EP0999143, EP0995693, EP0952087, EP0952087, EP0781709, EP0444611, DE3323644, DE3123766, DE2942022, DE2647775, DE20313059, AU629848, AU2005256602,

Abstract:
Source: US3892351A A **container** assembly is provided which comprises a composite tubular body having an outwardly rolled top rim which body has an asymmetrically tabbed membrane-type **closure** **sealingly** secured to the rolled rim so that the peripheral section of the **closure** conforms radially and circumferentially to an upwardly facing annular area of the rolled rim. The method of making the **container** subassembly comprises induction heat **sealing** a membrane-type **closure** comprising an electrically conductive sheet to a composite tubular body comprising an electrically conductive liner with electrical insulation means and heat activatable sealant disposed therebetween. The method further comprises biasing the peripheral section of the **closure** towards the rolled rim with a uniformly distributed force while the induction heat **sealing** is being effected.

PatBase - US3892351_A



488) Family number: 2072069 (US4090211A)

© PatBase

Title: Self-developing camera and film pack therefore

Priority: JP19740000877 19731229 JP19740000878 19731229 JP19740064782 19740606 JP19740066203 19740610 JP19740000879 19731229 JP19740065418 19740607

Family:

Publication number	Publication date	Application number	Application date
DE2456154 A1	19750710	DE19742456154	19741127
GB1489750 A	19771026	GB19740051668	19741128
JP1036600 C3	19810324	JP19740064782	19740606
JP1055173 C3	19810723	JP19740065418	19740607
JP1058686 C3	19810731	JP19740066203	19740610
JP50099531 A2	19750807	JP19740000877	19731229
JP50099532 A2	19750807	JP19740000878	19731229
JP50099533 A2	19750807	JP19740000879	19731229
JP50099726 A2	19750807	JP19740064782	19740606
JP50099727 A2	19750807	JP19740065418	19740607
JP50099728 A2	19750807	JP19740066203	19740610
JP55030204 B4	19800809	JP19740064782	19740606
JP55042733 B4	19801101	JP19740066203	19740610
JP55044371 B4	19801112	JP19740000879	19731229
JP55047730 B4	19801202	JP19740065418	19740607
JP56011931 B4	19810318	JP19740000878	19731229
US4090211 A	19780516	US19740527779	19741127

Probable Assignee: FUJI PHOTO FILM CO LTD

Assignee(s):(std)**:** FUJI PHOTO FILM CO LTD

Assignee(s): FUJI PHOTO FILM CO

Inventor(s):(std)**:** GOTO TOSHIO ; HAMADA YOICHI ; HORIUCHI HIDEO ; OISHI YASUSHI

International class (IPC 8-9): G03B17/52 G03C1/00 G03C3/00 G03C7/00 G03C8/42 G03D9/02 (Advanced/Invention); G03C1/00 G03C8/00 G03D9/00 (Core/Invention)

International class (IPC 1-7): E04B5/52 E04B5/54 G03B17/26 G03B17/50 G03B17/52 G03C1/00 G03C3/00 G03C5/54 G03D5/02

CPC: G03B17/52 G03D9/02

European class: G03B17/52 G03D9/02

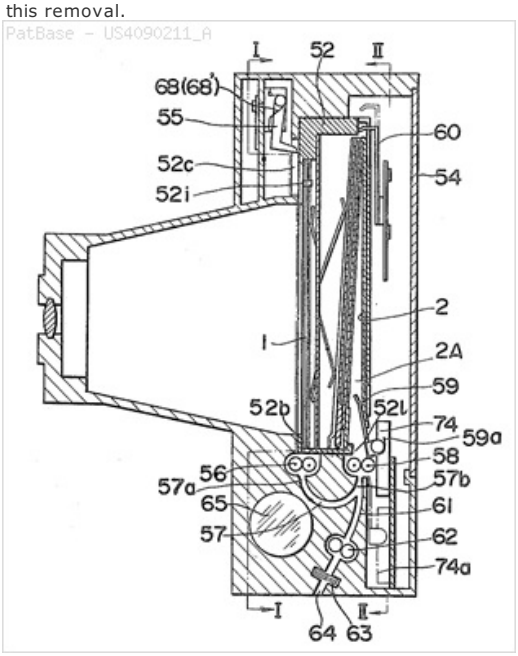
US class: 354/86 396/39 396/517 430/496

Classification Explorer

Cited documents: US3775127 A, US3745900 A, US3722383 A, US3714876 A, US3707117 A, US3694210 A, US3659511 A, US3630132 A, US2647049 A, US2572357 A, JP50099533 A2, JP49000878 A2, JP49000877 A2, JP46006079 A2,

Forward Citations: USD747400, USD746895, USD746894, US4755839, US4690530, US4688912, US4636862, US4096501, JP63226649, JP59024057, JP57042010, JP55092827, JP51067128, JP51014021, JP50142228, JP50099727, EP0295810, EP0268132, EP0251560, EP0001352,

Abstract:
Source: US4090211A A camera which permits film **units** to be initially stored as a plurality of first sheets and an equal number of second sheets. In taking a photograph, a first sheet is exposed and then transferred into correctly aligned contact with a corresponding second sheet, which may constitute a subsequently **sealable** folder or envelope for containment of the first sheet, or a **cover** which is bondable to the first sheet. This transfer of a first sheet is effected entirely independently in the camera, or by a camera mechanism acting on a draw mechanism attached firmly but not fixedly to the first sheet, in this latter case the draw mechanism being detached from the first sheet immediately subsequent to transfer thereof into association with the second sheet. The semifilm **unit** constituted by the assembled first sheet and second sheet is then removed to the exterior of the camera to form a complete film **unit** in which, the first sheet and second sheet are bonded together, and, if the semi-film **unit** is an auto-process type film **unit**, simultaneous processing thereof is effected during this removal.



489) Family number: 1486251 (US4252851A)

Title: MULTIPLE-LAYER FILMS

Priority: AU19740000090 19741220 AU19750086913 19741220 US19750585866 19750611 US19750538878 19750106 GB19740048422 19741111 GB19740013995 19740329 ZA19740008003 19741217

Family:

Publication number	Publication date	Application number	Application date
AT1038274 A	19770215	AT19740010382	19741230
AT346605 B	19781127	AT19740010382	19741230
AU197586913 A1	19770602	AU19750086913	19741220
AU490832 B2	19770602	AU19750086913	19741220
BE824348 A	19750714	BE19750152347	19750113
CA1059280 A1	19790731	CA19740216880	19741223
CH595984 A	19780228	CH19750000500	19750116
DE2460597 A1	19751002	DE19742460597	19741220
DE2460597 B2	19791122	DE19742460597	19741220
DE2460597 C3	19900510	DE19742460597	19741220
DK156549 B	19890911	DK19740006761	19741220
DK156549 C	19900312	DK19740006761	19741220
DK676174 A	19750930	DK19740006761	19741220
ES433288 A1	19761116	ES19740433288	19741223
FI364474 A	19750930	FI19740003644	19741217
FI61905 B	19820630	FI19740003644	19741217
FI61905 C	19821011	FI19740003644	19741217
FR2265540 A1	19751024	FR19750001082	19750115
FR2265540 B1	19790223	FR19750001082	19750115
GB1452424 A	19761013	GB19740013995	19740329
HK19777 A	19770506	HK19770000197	19770428
IT1028107 A	19790130	IT19740031095	19741230
JP50128781 A2	19751011	JP19750001111	19741227
JP52030434 B4	19770808	JP19750001111	19741227
LU71646 A	19760819	LU19750071646	19750114
NL163464 B	19800415	NL19740016843	19741224
NL163464 C	19850416	NL19740016843	19741224
NL7416843 A	19751001	NL19740016843	19741224
NO143658 B	19801215	NO19740004559	19741217
NO143658 C	19810325	NO19740004559	19741217
NO744559 A	19750930	NO19740004559	19741217
SE414290 B	19800721	SE19740016035	19741219
SE414290 C	19890406	SE19740016035	19741219
SE7416035 A	19750930	SE19740016035	19741219
SE7416035 L	19750930	SE19740016035	19741219
US4252851 A	19810224	US19790008110	19790131
ZA7408003 A	19760128	ZA19740008003	19741217

Probable Assignee: ICI LTD

Assignee(s):(std)**:** ICI LTD

Assignee(s): IMP CHEM IND LTD ; IMP CHEMICAL IND LTD ; IMP CHEMICAL IND LTD GB ; IMP CHEMICAL IND LTD TE LONDEN ; IMP CHEMICAL IND TE LONDEN GROOT BRITTANNIE LTD ; IMPERIAL CHEM IND LTD ; IMPERIAL CHEMICAL INDUSTRIES LIMITED ; IMPERIAL CHEMICAL INDUSTRIES LTD GB ; IMPERIAL CHEMICAL INDUSTRIES LTD ; IMPERIAL CHEMICAL INDUSTRIES LTD LONDON ; IMPERIAL CHEMICAL INDUSTRIES LTD LONDON GB ; IMPERIAL CHEMICAL INDUSTRIES LTD LONDEN ; IMPERIAL CHEMICAL INDUSTRIES LTD TE LONDEN ; IMPERIAL CHEMICAL INDUSTRIES LIMITED TE LONDEN GROOT BRITTANNIE ; LANSBURY ROBERT C ; HEGGS THOMAS G

Inventor(s):(std)**:** LANSBURY R ; LANSBURY R C ; LANSBURY ROBERT C ; LANSBURY ROBERT CLIVE ; HEGGS G TH ; HEGGS T ; HEGGS T G ; HEGGS THOMAS G ; HEGGS THOMAS GEOFFREY

Inventor(s): HEGGS THOMAS GEOFFREY WELWYN ; HEGGS THOMAS GEOFFREY WELWYN HERTFORDSHIRE GB ; CLIVE LANSBURY ROBERT ; GEOFFREY HEGGS THOMAS ; LANSBURY ROBERT CLIVE ST ALBANS ; LANSBURY ROBERT CLIVE ST ALBANS HERTFORDSHIRE GB ; R C LANSBURY ; ROBERT CLIVE LANSBURY ; ROBERT CLIVE LANSBURY AND THOMAS GEOFFREY HEGGS ; T G HEGGS ; THOMAS GEOFFREY HEGGS

International class (IPC 8-9): B29C49/00 B29C55/00 B29C55/02 B29D7/00 B32B27/00 B32B27/08 B32B27/32 C08F10/00 C08F210/00 C08J5/18 C08L23/10 C08L23/14 C08L23/18 (Advanced/Invention);
B29C49/00 B29C55/00 B29C55/02 B32B27/00 B32B27/08 B32B27/32 C08F10/00 C08F210/00 C08J5/18 C08L23/00 (Core/Invention);
B29D B32B B65D (Subclass/Invention)

International class (IPC 1-7): B29D7/00 B29D7/02 B29D7/24 B29D9/00 B32B27/00 B32B27/08 B32B27/32 B65B43/04 B65D17/16 B65D65/40 C08F210/06 C08J5/18 C08L23/10 C08L23/18

CPC: Y10T428/263 Y10T428/265 Y10T428/2817 Y10T428/2826 B32B27/00 C08L23/12 C08L23/14 C08L23/142 Y10T428/31855 Y10T428/31913 B32B7/12 B32B27/18 B32B2439/70 B32B27/32 B32B5/32 B32B2266/025 B32B2266/0278 B32B2266/08 B32B2601/00 B32B2605/003 B32B27/08

European class: B32B27/00 B32B27/32 M08L23/12 M08L23/14 M08L23/14A

US class: 428/334 428/336 428/347 428/349 428/500 428/516 526/348.6

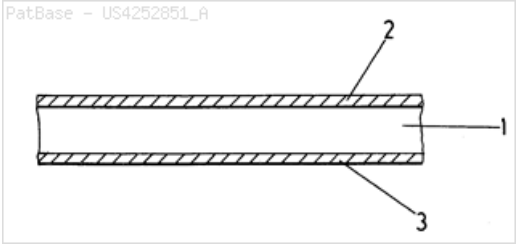
Classification Explorer

Cited documents: US3620825 A, US3540979 A, US3508944 A, US3345247 A, US3246061 A, US3112301 A, US3112300 A, US2918457 A, JP49035487 B4, JP49035487 B1, JP48044667 A2, JP47039225 A2, JP46005957 A2, JP41019437 B4, JP41019437 B1, JP41019437, JP354877, GB1452424 A, GB1096064 A, GB1018341 A, FR1306645 A, CA775184 A, BE712686 A,

Forward Citations: WO9933643, WO8304388, WO12050661, WO06074507, WO03031176, US8853327, US8637129, US8309478, US8147957, US8133537, US8119549, US8114507, US8029633, US7988894, US7960024, US7422781, US6924041, US6909028, US6887582, US6706342, US6689857, US6686055, US6653523, US6416857, US6387529, US6309736, US6238767, US6075179, US6045900, US5811185, US5698279,

US5443866, US5318824, US5204182, US5204179, US5116926, US4973375, US4925902, US4761462, US4707414, US4675247, US4670529, US4663238, US4604322, US4528220, US4481254, US4460631, US4447494, US4419411, US4419410, US4410582, US4380567, US4348457, US4297415, US2011206849, US2010224530, US2010190399, US2010190398, US2010189963, US2010186880, US2009045543, US2008199643, US2005244661, US2004209028, US2004146731, JP62042843, JP58215345, JP56015350, JP54162785, JP54135875, JP54066990, JP53114887, JP53113692, JP53021688, JP52068279, GB2296216, GB2296216, FR2446844, FR2444552, FR2428651, FR2409858, FR2362894, FR2362726, EP1655131, EP0695630, EP0225685, EP0225685, EP0050455, EP0050455, EP0004633, DE3331749, DE3001427, DE2923754, DE2813334, DE2460597, AT381065,

Abstract:
Source: US4252851A A multiple-layer film having a substrate layer of high density polyethylene or a propylene homo- or co-polymer, and, on at least one surface of the substrate, a heat-**sealable** layer of a propylene co-polymer containing from 80 to 95 percent of propylene, the balance being a C4 to C10 olefin. The substrate and surface layers exhibit a monoclinic crystalline structure.



490) Family number: 1175971 (US3978531A)

Title: Lifting device

Priority: AU19750080126 19750414 CH19740004343 19740328 DK19750001292 19750326
US19750561976 19750325 DK19760003635 19760812 SE19740004343 19740401

Family:

Publication number	Publication date	Application number	Application date
AU197580126 A1	19761021	AU19750080126	19750414
AU491786 B2	19761021	AU19750080126	19750414
BE827330 A	19750716	BE19750154896	19750328
DE2513718 A1	19751009	DE19752513718	19750327
DK129275 A	19751002	DK19750001292	19750326
DK135609 B	19770531	DK19760003635	19760812
DK135609 C	19771107	DK19760003635	19760812
DK136933 B	19771219	DK19750001292	19750326
DK136933 C	19780529	DK19750001292	19750326
DK363576 A	19760812	DK19760003635	19760812
FR2265670 A1	19751024	FR19750009600	19750327
FR2265670 B1	19800822	FR19750009600	19750327
GB1458175 A	19761208	GB19750011623	19750320
HK47977 A	19770923	HK19770000479	19770915
NL176429 C	19850416	NL19750003880	19750401
NL7503880 A	19751003	NL19750003880	19750401
NO138748 B	19780731	NO19750001029	19750325
NO138748 C	19781108	NO19750001029	19750325
NO751029 A	19751002	NO19750001029	19750325
SE387236 B	19760906	SE19740004343	19740401
SE387236 C	19761216	SE19740004343	19740401
SE7404343 A	19751002	SE19740004343	19740401
SE7404343 L	19751002	SE19740004343	19740401
SU940630 D	19820630	SU19752119605	19750401
US3978531 A	19760907	US19750561976	19750325
US4084275 A	19780418	US19760711961	19760805

Probable Assignee: ILON BE

Assignee(s):(std)**:** ILON B E ; ILON BENGT ERLAND CH ; BENGT ERLAND ILON TE MEGGEN ZWITSERLAND

Assignee(s): BENGT ERLAND NON ; BENGT ERLAND ILON ; ILON BENGT ERLAND ; ILON BE

Inventor(s):(std)**:** ILON B E ; ILON BENGT ERLAND

Inventor(s): BENGT ERLAND ILON ; BENGT ERLAND ILON SE ; BENGT ERLAND OON ; ERLAND ILON BENGT

International class (IPC 8-9): A01K15/00 A61G1/003 A61G7/10 A61G7/14 B66F3/35 (Advanced/Invention);
A61G1/003 (Advanced/Non-invention);
A01K15/00 A61G1/003 A61G7/10 B66F3/24 (Core/Invention)

International class (IPC 1-7): A47B83/04 A47C31/10 A61G1/00 A61G12/00 A61G13/00 A61G7/10 B66F19/00

CPC: A01K15/00 A61G1/003 A61G7/103 B66F3/35 A61G7/1021 A61G2200/32

European class: A01K15/00 A61G1/003 A61G7/10P4 B66F3/35 K61G200/32 K61G7/10N8

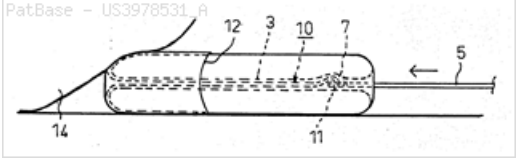
US class: 5/81.1T

Classification Explorer

Cited documents: US3978531 A, US3895403 A, US3757788 A, US3526908 A, US3178732 A, DE1945426 A1, DE1860309 U, AT115403 B,

Forward Citations: WO9527464, WO9107158, WO08071940, WO04036067, WO04036067, USD732379, US8460178, US8307474, US8052326, US7621944, US6079062, US5920929, US5644805, US5570482, US5530976, US5428851, US5148558, US5070597, US5005232, US4924538, US4868967, US4361918, US4271546, US4104425, US4084275, US4051565, US2010138989, US2006264701, US2006120638, US2006004427, GB2473047, GB2473046, EP0625347, EP0609758, EP0210061, DE3901336, DE2905305,

Abstract:
Source: US3978531A A lifting device which may be rolled to a position under an object to effect lifting thereof. The device of the invention is particularly useful in the lifting of human patients as it accomplishes lifting without sliding action between the patient and the exterior of the lifting device. The lifting device includes a hollow member of flexible material with a recess running from end to end entirely through the member. The member also defines an enclosed chamber surrounding the recess and having a generally elongated, flattened, toroidal configuration. Preferably, the chamber is filled with a fluid medium for supporting the member and maintaining its shape. A protecting device is engageable both with said recess and with the exterior of said member to **cover** and protect the same. At least part of the surface of the hollow member which faces the interior of the chamber may include a layer of lubricant thereon to facilitate rolling of the member.



491) Family number: 3871193 (GB1401471A)

Title:	HERMETICALLY **SEALED** **PACKAGES** HAVING DUAL **SEALS**
Priority:	GB19720040816 19720902

Family:

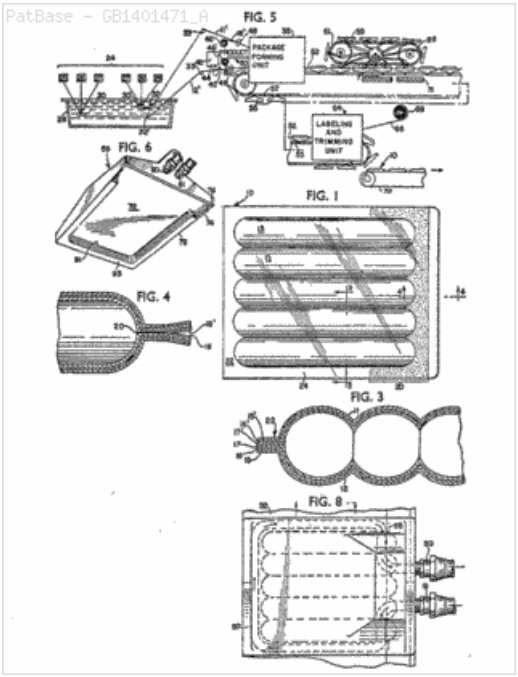
Publication number	Publication date	Application number	Application date
GB1401471 A	19750716	GB19720040816	19720902

Probable Assignee:	MAYER AND CO INC O
Assignee(s):(std):	MAYER AND CO INC O
Assignee(s):	MAYER CO INC OSCAR
International class (IPC 8-9):	B65B9/04 B65D75/32 B65D75/34 (Advanced/Invention); B65B9/00 B65D75/28 (Core/Invention)
International class (IPC 1-7):	B65B9/04 B65D75/32 B65D75/34 B65D81/34
CPC:	B65B9/04 B65D75/324
European class:	B65B9/04 B65D75/32B3B

Classification Explorer

Forward Citations:	WO9628363, WO11041876, US5857582, EP0196799,

Abstract:
Source: GB1401471A 1401471 Hermetically **sealed** **packages** OSCAR MAYER and CO Inc 2 Sept 1972 40816/72 Heading B8C A **package** 10, for products such as a plurality of weiners, as shown, or for sliced luncheon meats, cheese and c., comprises top and bottom cold-formable laminates 11, 12 which are preferably both formed of an inner layer 16, 16^1 of P.V.C. and outer layers 15, 151 and 17, 17^1 of polyvinylidene chloride the bottom laminate 12 being provided with a strip 20 of adhesive coating such as low, or, non-solvent "hot melt" before the laminates 11, 12 are drawn together by vacuum around the product so that a permanent edge **seal** portion is formed where the two laminates 17, 17^1 are drawn directly together at 24 due to their inherent cohesion and a peelable reclosable, **seal** is formed around the remainder of the peripheral edge of the **package** due to the adhesive strip 20. A pair of paper strips 18, 18^1 **cover** the strip 20, as shown, to facilitate the **opening** of the peelable **seal**. A machine, Fig. 5, for making the **package** is generally of the kind described in Specification 965,033 and is modified mainly in that it includes an adhesive applicator wheel 40 and doctor blade 44 for applying the adhesive strips 20, a pair of paper strips 18, 18^1 which are fed continuously from rolls 46, 46^1 and are pressed respectively by pairs of rollers 48, 48^1 against the webs 11^1, 12^1 to adhere thereto, and a **packaging** forming **unit** 35 in which the webs 11^1, 12^1 are drawn around the product. A continuous web 52 with a series of spaced products **packaged** between the webs 11^1, 12^1, move synchronously between co-operating upper and lower die elements 59, 55 which are carried respectively on chain conveyers 61, 57 and have **sealing** faces 74, 78 shaped, as shown, to produce the permanent and peelable **seals** 24, 20 respectively. At least the upper die 59 is provided with a heating duct 87 for heating medium such as steam, hot water and c. desirably to heat briefly, the permanent **seal** edge portions 24 of the **packages**. After the pairs of dies 59, 55 have separated the web 52 is conveyed through a **labelling** and trimming **unit** 64 where the **packages** 10 are separated from a perforated web 66 which is continuously wound on a roll 68 the **packages** being discharged onto a feedout conveyer 70. The dies 59, 55 may alternatively be heated by heaters 71. The lower lamina 12 may be replaced by a relatively rigid baseboard of, for instance, bleached Kraft paperboard having a coating of microcrystalline paraffin wax on its bottom surface and, on its top surface, an oxygen-barrier material such as aluminium foil with a hot melt adhesive upper surface for **sealing** with the film 17. Alternatively, the upper film of the baseboard may comprise a laminate having an upper face of polyvinylidene chloride.



492) Family number: 1384837 (US4109477A)

© PatBase

Title: Offshore driller rig

Priority: DE19742407655 19740218 DE19742421147 19740502 DE19742427130 19740605 DE19742437911 19740807 DE19742440664 19740824 DE19742439518 19740817 DE19742460388 19741220 US19750550725 19750218

Family:

Publication number	Publication date	Application number	Application date
CA1007873 A1	19770405	CA19750220309	19750218
DE2407655 A1	19750821	DE19742407655	19740218
DE2421147 A1	19751113	DE19742421147	19740502
DE2427130 A1	19751218	DE19742427130	19740605
DE2437911 A1	19760219	DE19742437911	19740807
DE2439518 A1	19760304	DE19742439518	19740817
DE2440664 A1	19760304	DE19742440664	19740824
DE2460388 A1	19760624	DE19742460388	19741220
FR2264135 A1	19751010	FR19750004431	19750213
FR2264135 B1	19790928	FR19750004431	19750213
GB1499142 A	19780125	GB19750006123	19750213
JP50124402 A2	19750930	JP19750020312	19750218
JP58012409 B4	19830308	JP19750020312	19750218
NL7501828 A	19750820	NL19750001828	19750217
NO143755 B	19801229	NO19750000425	19750210
NO143755 C	19810408	NO19750000425	19750210
NO750425 A	19750819	NO19750000425	19750210
SU959636 D	19820915	SU19752106587	19750218
US4109477 A	19780829	US19750639836	19751211

Probable Assignee: SALZGITTER MASCHINEN AG

Assignee(s):(std)**:** SALZGITTER MASCHINEN AG ; SALZGITTER MASCH AG

Assignee(s): SALZGITTER MASCH TE SALZGITTER BAD BONDSREPUBLIEK DUITSLAND AG ; SALZGITTER MASCH 3320 SALZGITTER AG ; SALZGITTER MASCHINEN AG 3320 SALZGITTER ; SALZGITTER MASCHINEN AG DT ; SALZGITTER MASCHINEN AKTIENGESELLSCHAFT ; SALZGITTER MASCHINEN AKTIENGESELLSCHAFT TE SALZGITTER BAD BONDSREPUBLIEK DUITSLAND ; ZALTSGITTER MASHINEN AG FA ; VOGEL RUDOLF

Inventor(s):(std)**:** FOGEL RUDOLF ; VOGEL R ; VOGEL RUDOLF ; VOGEL RUDOLF DR

Inventor(s): RUDOLF FOGEL DE ; RUDORUFU FUOOGERU ; 201274P2460388

International class (IPC 8-9): E02B17/00 E02B17/02 E21B15/02 (Advanced/Invention);
E21B15/02 (Advanced/Non-invention);
E02B17/00 E21B15/00 (Core/Invention);
E21B15/00 (Core/Non-invention)

International class (IPC 1-7): B63B35/44 B63H25/42 E02B17/00 E02B17/02 E02D17/00 E02D21/00 E02D27/04 E02D27/42 E02D27/52 E21B15/02

CPC: E02B17/02 E02B17/0004 E02B17/0008 E02B2017/0078 E02B2017/0082 E02B17/027

European class: E02B17/00A E02B17/00B E02B17/02 E02B17/02D P02B17/00K8B P02B17/00K8D

US class: 405/207 405/225 405/226 405/227 405/228

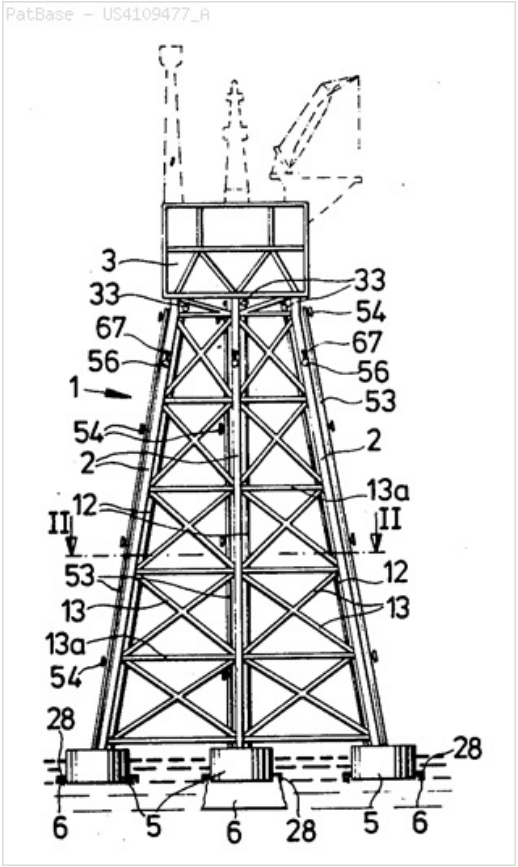
Classification Explorer

Cited documents: US3824795 A, US3815372 A, US2986889 A, US2967400 A, US2941369 A, US2924947 A, US2600761 A, US2589146 A, US2579703 A,

Forward Citations: WO14202948, WO13064327, WO11070191, WO11070191, US9815526, US9771700, US9371625, US9297264, US9073733, US8920200, US8608441, US7891910, US7407342, US6481932, US5807029, US4761096, US4721416, US4480944, US4470468, US4106302, US4063426, US2016244128, US2014193207, US2012304913, US2012282037, US2011200399, US2011129301, US2010296875, US2009191004, US2007286728, US2006222465, FR2489392, FR2409957, ES2386268, EP2955277, DE3135705, DE3135704, DE2927804, DE19647673, DE10349109, DE10349109, DE102007043268, CN105019419,

Abstract:
Source: US4109477A A platform is arranged on one or more separate frameworks. Each of the frameworks is provided with a plurality of downwardly extending hollow legs. Each of the legs has a lower end and its interior is accessible from the platform at its upper end. A plurality of ballastable floats together at least furnish a part of the buoyancy required to maintain the framework structure afloat preliminary to its anchoring on the ocean bottom; each of the floats is mounted at one of the lower ends of the legs and has a bottom wall and a deformable skirt surrounding the bottom wall and depending downwardly beyond the same. A spider-like **unit** is provided at each of the floats and adapted to discharge pressure medium against the ocean bottom beneath the float when the latter is proximal to or rests upon the ocean bottom. The interior of each leg is connectable with the interior of the associated float and with the space beneath the float so that ballasting material, such as split rock or the like, can be pored through the leg onto the ocean bottom beneath the float, and also ultimately fill up the float and possibly also the leg; this material can be supplied from the upper platform.

PatBase - US4109477_A



493) Family number: 1161992 (US3900028A)

Title: Injection site for sterile medical liquid **container**

Priority: US19740445852 19740226

Family:

Publication number	Publication date	Application number	Application date
AU197477044 A1	19760701	AU19740077044	19741231
CA1017707 A1	19770920	CA19740217183	19741231
DE2501428 A1	19750828	DE19752501428	19750115
GB1465041 A	19770216	GB19750007394	19750221
IT1026410 A	19780920	IT19750047776	19750121
JP1190164 C3	19840213	JP19750021434	19750220
JP50149475 A2	19751129	JP19750021434	19750220
JP58013418 B4	19830314	JP19750021434	19750220
US3900028 A	19750819	US19740445852	19740226

Probable Assignee: MCGAW INC MORAINE MONTGOMERY COUNTY A CORP OF OH

Assignee(s):(std)**:** AMERICAN HOSPITAL SUPPLY CORP

Assignee(s): AMERIKAN HOSUPITARU SAPURAI CORP ; GENERAL ELECTRIC CAPITAL A NEW YORK CORP CORP ; GENERAL ELECTRIC CAPITAL CORP ; KENDALL MCGAW LABORATORIES INC ; WELLS FARGO BANK NA ; MCGAW INC ; KENDALL MCGAW LABORATORIES INC A CORP OF OH ; KENDALL MCGAW LABORATORIES INC AN OH CORP ; MCGAW INC A CORP OF DELAWARE ; MCGAW INC MORAINE MONTGOMERY COUNTY A CORP OF OH ; MCPHEE CHARLES J

Inventor(s):(std)**:** MCPHEE CHARLES J ; MCPHEE CHARLES JOSEPH ; MOPHEE CH J

Inventor(s): JOSEPH MCPHEE CHARLES ; CHAARUZU JOSEFU MATSUKUFUI ; CHARLES JOSEPH MCPHEE

International class (IPC 8-9): A61J1/00 A61J1/05 A61J1/14 B65D51/18 B65D51/28 (Advanced/Invention); A61J1/00 A61J1/05 A61J1/14 B65D51/18 B65D51/24 (Core/Invention)

International class (IPC 1-7): A61J1/00 A61M5/00 B65D1/02 B65D41/20 B65D47/36 B65D51/18 B65D51/20 B65D53/08

CPC: A61J1/1406

European class: A61J1/00C2 A61J1/14B

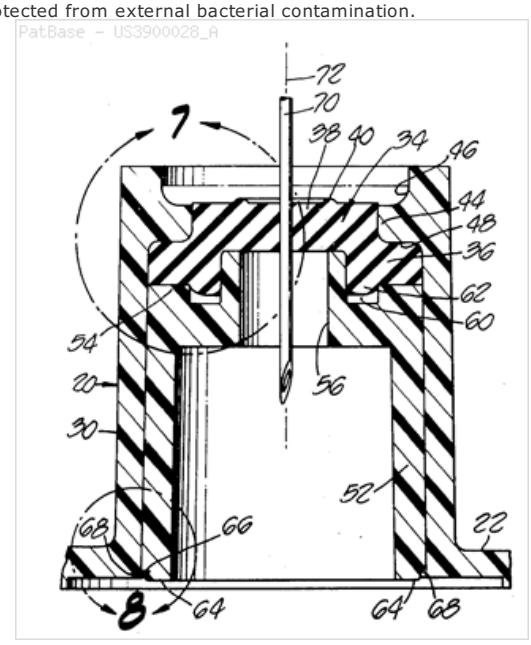
US class: 128/272 215/247 604/415

Classification Explorer

Cited documents: US3519158 A, US3368560 A, US3030955 A, US2847007 A, US2364126 A,

Forward Citations: WO9110459, WO8902399, WO8504097, WO13176587, WO03099191, US9775777, US9731878, US9694165, US9493281, US8968249, US8758322, US8753317, US8721616, US8211081, US8142736, US8118802, US7828787, US7445611, US6994699, US6663599, US6605076, US6569125, US6447498, US6261270, US6261266, US6217568, US6213996, US6193697, US5871500, US5797897, US5776125, US5678713, US5658260, US5649637, US5595314, US5343900, US5269350, US5246434, US5211638, US5199948, US5199473, US5188620, US5088995, US5086813, US5086783, US4941517, US4892222, US4665959, US4601703, US4501372, US4416661, US4361253, US4307766, US4294249, US4219912, US4013064, US2015157836, US2013102989, US2011022024, US2010206834, US2010030182, US2009065465, US2009054865, US2008011707, US2005192537, US2004153021, US2003233083, JP62024829, JP54129795, FR2618682, EP0721897, EP0487712, EP0051718, DE3310265, CN104470487,

Abstract:
Source: US3900028A An injection site for a parenteral liquid bottle with an improved structure and assembly method for securing a puncturable diaphragm to a **closure** of the bottle. The **closure** is formed with an integral upstanding tube that has an internal flange at its outer end. A rubber diaphragm and a tubular retainer are telescopically inserted into the upstanding tube from the tube's inner end before the **closure** is assembled to the bottle. The retainer squeezes the diaphragm against an undersurface of the flange to form a **seal** and the retainer is locked in this position. After the **closure** is joined to the bottle, the entire joint between the upstanding tube and the retainer is inside the bottle and protected from external bacterial contamination.



494) Family number: 3878019 (GB1405341A)

Title:	HEAT **SEALABLE** ENCLOSURE
Priority:	GB19730033695 19730716

Family:

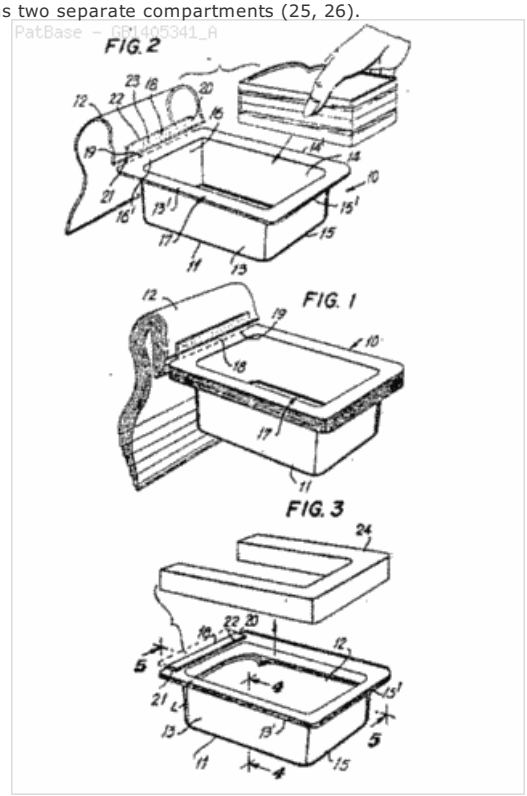
Publication number	Publication date	Application number	Application date
GB1405341 A	19750910	GB19730033695	19730716

Probable Assignee:	BERNHARDT D
Assignee(s):(std):	BERNHARDT D
International class (IPC 1-7):	B65B7/20 B65D37/00
CPC:	B65D21/0233 B65D77/2024
European class:	B65D21/02F B65D77/20E

Classification Explorer

Forward Citations: US4949527, EP0448410, EP0115269,

Abstract:
Source: GB1405341A 1405341 Heat-**sealable** enclosure D BERNHARDT 16 July 1973 33695/73 Heading B8C A heat **sealable** enclosure comprises a tray member of rigid, heat-**sealable** plastics material the tray including a mouth portion surrounded by a continuous flange 13^1-16^1 defining a frame, the uppermost surface of the frame being disposed in a common plane, an integral flap member 18 extending outwardly from a side portion of the frame, the flap member being hingedly connected to said frame member by a weakened line of connection 19, a transparent **cover** sheet 12 of a size adapted to register with the frame, said **cover** sheet 12 being connected to the upper surface of said flap along a narrow band, or line, 23, interposed between said line of connection 19 and the longitudinal marginal edge 22 of said flap. As shown, a heat-**sealable** **cover** sheet 12, preferably formed of transparent plastics material, is connected to the flap 18 by a narrow heat **seal** band, or line, of adhesive 23 which is disposed between the free longitudinal edge 22 of the flap 18 and the weakened line 19, which may be in the form of a perforation, or score, and which permits hinging as well as severing, a narrow margin of non-adhesive flap being left adjacent the longitudinal edge 22. The tray 11, is preferably of rectangular shape, and formed of foamed polystyrene. Alternatively, the tray may be formed of P.V.C. or, orientated polystyrene. The trays can be stacked as shown in Fig. 1, and, in use, a food article is deposited in a tray, and the flap 18, and its associated sheet 12, is folded over 180 degrees about the weakened line 19 so as to sandwich the adhesively connected portion of the sheet 12 between the flap 18 and the flange portion 16, Fig. 3. The sheet 12 is then secured, along a **seal** line, or area, L to the flange 15^1 and the flanges 13^1, 14^1 up to the end edges 20, 21 of the flap which overlap the flanges 13^1, 14^1, the **sealing** being carried out by means of a heat **seal** forming element 24, Fig. 3, or, by a heater pencil, not shown. In order to **open** a **sealed** **container** the user can reach beneath the non- adhesive marginal edge 22 of the flap 18, sever the relatively light adhesive connection 23 between the sheet 12 and the flap 18 at the same time tearing off the flap 18 along the weakened line 19. Access between the **cover** sheet 12 and the flange 16 can then be obtained so that the **cover** 12 can be torn off. In a modification, Fig. 9 not shown, the tray has two separate compartments (25, 26).



495) Family number: 19177550 (US3908857A)

Title: Tape **seal** for **container**

Priority: AU19750080265 19750417 US19740507036 19740918 US19740514039 19741011 US19740514703 19741015 US19750622302 19751014

Family:

Publication number	Publication date	Application number	Application date
AR210865 A1	19770930	AR19750260330	19750910
AU197580158 A1	19761002	AU19750080158	19750415
AU197580265 A1	19761104	AU19750080265	19750417
BE833482 A	19760317	BE19751006889	19750917
BE834331 A	19760409	BE19751006941	19751009
BR7504683 A	19760803	BR19750004683D	19750722
CA1036107 A1	19780808	CA19750219842	19750211
CA1038799 A1	19780919	CA19750222362	19750318
CH591375 A	19770915	CH19750012032	19750917
DE2519709 A1	19760408	DE19752519709	19750502
DE2519709 B2	19790712	DE19752519709	19750502
DK146921 B	19840213	DK19750004164	19750917
DK146921 C	19840716	DK19750004164	19750917
DK416475 A	19760319	DK19750004164	19750917
ES212009 U	19760601	ES19750212009U	19750429
ES212009 Y	19761101	ES19750212009U	19750429
ES213833 U	19760701	ES19750213833U	19750707
ES213833 Y	19770116	ES19750213833U	19750707
ES439207 A1	19770216	ES19750439207	19750707
FI59766 B	19810630	FI19750000268	19750131
FI59766 C	19811012	FI19750000268	19750131
FI750268 A	19760319	FI19750000268	19750131
FI750552 A	19760412	FI19750000552	19750226
FI750553 A	19760416	FI19750000553	19750226
FR2287391 A1	19760507	FR19750020378	19750627
FR2288036 A1	19760514	FR19750021244	19750707
FR2291098 A1	19760611	FR19760005814	19760302
FR2291098 B1	19811231	FR19760005814	19760302
FR2299229 A1	19760827	FR19750019691	19750624
FR2299229 B1	19810821	FR19750019691	19750624
GB1501162 A	19780215	GB19750037155	19750909
GB1532975 A	19781122	GB19750041782	19751013
HK18780 A	19800418	HK19800000187	19800410
HK25880 A	19800523	HK19800000258	19800515
IN144036 A	19780311	IN1975CA01969	19751010
IT1044057 A	19800320	IT19750027317	19750917
JP1102658 C3	19820625	JP19750065191	19750530
JP51037785 A2	19760330	JP19750065191	19750530
JP56043940 B4	19811016	JP19750065191	19750530
NL177196 B	19850318	NL19750010955	19750917
NL177196 C	19850816	NL19750010955	19750917
NL7510955 A	19760322	NL19750010955	19750917
NL7511826 A	19760413	NL19750011826	19751008
NO752842 A	19760319	NO19750002842	19750815
SE423079 B	19820413	SE19750009360	19750822
SE423079 C	19820722	SE19750009360	19750822
SE7509360 A	19760319	SE19750009360	19750822
SE7509360 L	19760319	SE19750009360	19750822
US3908857 A	19750930	US19740514703	19741015
US3990615 A	19761109	US19740507036	19740918
US4029033 A	19770614	US19750622302	19751014
ZA7500899 A	19760929	ZA19750000899	19750212
ZA7500900 A	19760929	ZA19750000900	19750212
ZA7501453 A	19761027	ZA19750001453	19750310

Probable Assignee: CONTINENTAL GROUP

Assignee(s):(std)**:** CONTINENTAL CAN CO ; CONTINENTAL CAN CO INC ; CONTINENTAL CAN CO YNC ; CONTINENTAL CAN COMPANY INC TE NEW YORK ; CONTINENTAL CAN COMPANY INC TE NEW YORK NEW YORK V ; CONTINENTAL CAN INC ; CONTINENTAL CAN COMPANY INC ; CONTINENTAL CAN COMPANY YNC ; CONTINENTAL GROUP

Assignee(s): CONTINENTAL GROUP INC NEW YORK N Y V ST A ; CONTINENTAL GROUP INC ; THE CONTINENTAL GROUP INC ; THE CONTINENTAL GROUP INC NEW YORK N Y V ST A ; KERWIN JOSEPH E ; ERLANDSON PAUL M ; CHIAPPE WAYNE T ; CONTINENTAL CAN COMPANY INC TE NEW YORK NEW YORK VER ST V AM ; CONTINENTAL CAN CY INC

Inventor(s):(std)**:** CHIAPPE W ; CHIAPPE W T ; CHIAPPE WAYNE T ; ERLANDSON P ; ERLANDSON P M ; ERLANDSON P M K ; ERLANDSON PAUL M ; CHIAPPE WAYNE THOMAS ; ERLANDSON PAUL MCKILLOP ; F C NEWMAN ; J E KERWIN ; JOSEFU EDOWAADO KAAUIN ; KERWIN J ; KERWIN J E ; KERWIN JOSEPH E ; HOORU MATSUKUKIROTSUPU AARANDO ; KERWIN JOSEPH EDWARD ; NEWMAN F ; NEWMAN F C ; NEWMAN FC ; NEWMAN FRED C ; P M ERLANDSON ; W T CHIAPPE

Inventor(s): C NEWMAN FRED ; PAUL MCKILLOP ERLANDSON ; T CHIAPPE WAYNE ; NEWMAN FRED C LA GRANGE PARK ; M ERLANDSON PAUL ; HOORU MATSUKUKIROTSUPU AARANDOSON ; KERWIN JOSEPH E WESTERN SPRINGS ; JOSEPH E KERWIN AND PAUL M ERLANDSON ; JOSEPH EDWARD KERWIN ; FRED C NEWMAN ; E KERWIN JOSEPH ; ERLANDSON PAUL M PALOS PARK ; CHIAPPE WAYNE T HINSDALE

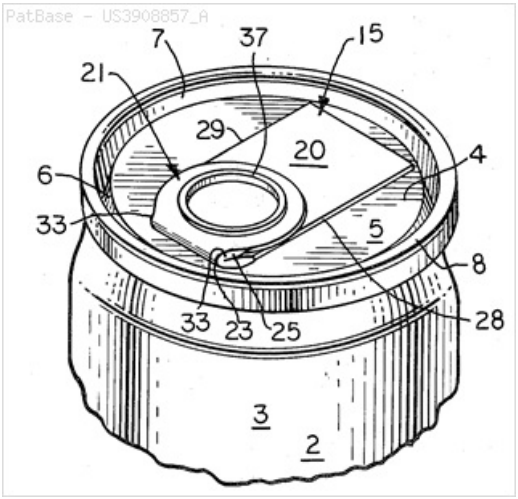
International class (IPC 8-9): B21D51/44 B65D17/50 B65D47/10 B65D53/08 B65D77/30 (Advanced/Invention); B21D51/38 B65D17/00 B65D47/06 B65D77/22 (Core/Invention)

International class (IPC 1-7):	B21D51/38 B21D51/44 B29C B65D11/06 B65D17/02 B65D17/06 B65D17/16 B65D17/20 B65D17/24 B65D17/46 B65D17/50 B65D19/30 B65D25/38 B65D39/00 B65D41/00 B65D43/00 B65D47/00 B65D47/04 B65D47/06 B65D47/10 B65D47/36 B65D51/00 B65D51/14 B65D51/14 B65D51/20 B65D53/08 B65D77/30 B65D83/06 B65D85/72 B67B7/00 C09J5/00
CPC:	B65D2517/5008 B65D2517/5029 B65D2517/5078 B65D17/502 B65D2231/02 B65D2231/022 B65D2517/0013 B65D2517/0049 B65D2517/0062 B65D2517/0094 B65D2517/5005 B65D2517/5032 B65D2517/5059 B65D2517/5083 Y10T29/49885
European class:	B65D17/50A1 L65D231/02 L65D231/02A L65D517/00Y2B L65D517/00Y6A L65D517/00Y7A1A L65D517/00Y8B L65D517/50M1 L65D517/50M10A1 L65D517/50M10B L65D517/50M2 L65D517/50P3 L65D517/50Q1A L65D517/50Q5
US class:	113/121C 156/69 220/260 220/269 220/359 220/359.2 220/359.3 222/485 222/541 222/541.1 222/541.9 222/563 29/458

Classification Explorer

Cited documents:	US3927793 A, US3889844 A, US3883034 A, US3807595 A, US3804287 A, US3711011 A, US3666138 A, US3547305 A, US3292828 A, US3281024 A, US3251509 A, US3187932 A, US2870935 A, US2738916 A,
Forward Citations:	WO9641743, WO9320854, WO9315773, WO7901094, WO13068594, USD582274, USD582273, USD533452, USD532691, USD532298, USD530610, USD513452, USD509426, USD456292, USD444385, USD439534, US9656032, US9649455, US9265901, US9242057, US9168343, US9032953, US8973784, US8944285, US8869735, US8662075, US8596265, US8578934, US8505773, US8490818, US8327847, US8240935, US8181591, US8157128, US8141550, US8082873, US8079362, US8074643, US8074594, US8057118, US7984826, US7886934, US7757688, US7743945, US7650883, US7621273, US7597102, US7584712, US7575130, US7568481, US7543582, US7516738, US7341057, US7111749, US7100530, US7004164, US6997349, US6988642, US6953039, US6938796, US6926002, US6886707, US6786447, US6761161, US6745760, US6729330, US6561384, US6544613, US6435372, US6412637, US6382785, US6336453, US6328037, US6321927, US6305546, US6164769, US6161724, US6142339, US6082358, US5887742, US5688544, US5304265, US5299701, US5271892, US5261548, US5199613, US5110041, US5013516, US4853735, US4762246, US4723391, US4582216, US4577777, US4564121, US4562936, US4557398, US4537326, US4529468, US4526291, US4520923, US4500011, US4494681, US4478667, US4473168, US4462507, US4332846, US4324343, US4253587, US4228633, US4176760, US4167234, US4165004, US4164303, US4155481, US4141468, US4135637, US4131211, US4091957, US3990603, US3985261, US2011226771, US2011220649, US2008197153, US2007177929, US2007007310, US2004140240, US2004118847, US2004079765, US2004000573, US2003213803, JP57163643, JP57028749, JP54028642, GB2306937, GB2304673, GB2168312, GB2168312, GB2063205, FR2470086, FR2432445, FR2401068, FR2398670, EP0223094, EP0185516, EP0113698, EP0105026, EP0030649, EP0003603, DE9316645, DE9305280, DE3927466, DE3714949, DE3233106, DE3118639, DE3101084, DE3043933, DE2950214, DE2926110, DE2826612, DE2624454, DE19506953, DE19506953,

Abstract:
Source: US3908857A A tape **seal** end **closure** for closing pour **openings** in the end panel of a **container**. The tape is of rectangular configuration applied to a round end panel and to **cover** all of the **openings** extends to an area proximate the circular peripheral seaming chuck guide groove in the end panel. The tape is provided with a ring pull which is folded over the tape and forms corners with the body portion of the tape at its lateral edges. These corners, when the body portion is positioned to adequately **cover** all of the pour **openings** in the end panel project over and encroach upon the chuck guide groove since the proximate edge of the body portion of the tape extends chordally with respect to the groove. Cutting off these corners develops notches which concentrate failure - promoting stresses causing the tape to tear and thus frustrating **opening** of the **container**. The invention solves the problem by providing novel dart folds in these corners which clear the groove and which unfold when the ring pull is lifted thereby developing the full strength of the tape.



496) Family number: 1176880 (US3908856A)

Title:	**CONTAINER OPENING** SEGMENT WITH SWIVEL ATTACHMENT
Priority:	US19730354807 19730426 US19750617002 19750926

Family:

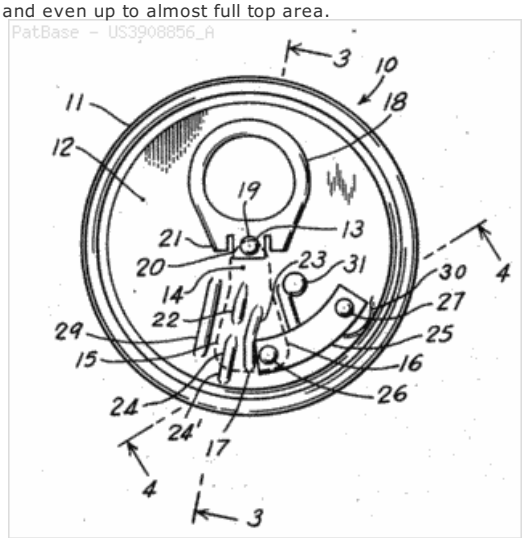
Publication number	Publication date	Application number	Application date
US3908856 A	19750930	US19730354807	19730426
US3991901 A	19761116	US19750617002	19750926

Probable Assignee:	PERRY WALTER MERTON
Assignee(s):(std):	PERRY WALTER MERTON
Inventor(s):(std):	PERRY WALTER MERTON
International class (IPC 8-9):	B65D17/28 B65D17/34 B65D41/32 (Advanced/Invention); B65D17/28 B65D41/32 (Core/Invention)
International class (IPC 1-7):	B65D17/24 B65D17/34 B65D41/32
CPC:	Y10S220/906 B65D17/4012
European class:	B65D17/16B2
US class:	220/269 220/273 220/906

Classification Explorer

Cited documents:	US3813000 A, US3795342 A, US3743129 A, US3731836 A, US3442416 A, US3411661 A,
Forward Citations:	WO8403080, WO13081638, WO0044635, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, US9714115, US9694935, US9592936, US9533800, US9446879, US9321562, US9233784, US8567158, US5411159, US4234099, US4125203, US4096967, US4008823, US2012031056, US2010219187, US2005252998, RU2541277, KR101388172, GB2232397, FR2394456, FR2394456, FR2393733, DE3303425,

Abstract:
Source: US3908856A An easy **openable** **container** top having a segmental **opening** area defined by a score line with manually operated pull **tab**, and in which the segment remains attached to the **container** after **opening**. The attaching means comprises a compact flexible arm member having one end attached to the segment, and extending out to attachment means to the top. Attachment means preferably allows pivoting so after the segment is torn out it is swiveled to a position clear of the **opening**, where it does not interfere with drinking from the **container** or pouring out contents. Longitudinal ribbing serves to keep the main area of the segment comparatively flat during tear out for compact **storage** against the top. Attachment arm is preferably made of a polyamide or polypropylene for strength, flexibility, and retention of shape. A recess may be provided in the top for depressed **storage** of segment after **opening**. For **openable** segments having the pull **tab** attached near the can rim, and where the metal near the rivet is therefore doubled back sharply on **opening**, a small rib alongside the rivet makes the curvature more gradual to prevent break-off, or there may be a rib on each side of the rivet. Easier break away of the segment from the top at final end of the **opening** operation may be obtained by means of a rib which extends out across the end score line. Or supplementary score line grooving on the underside may be provided for this purpose. **Container** top may be of any suitable material, including aluminum, steel, and plastic. Segment may tear from the inner region toward the rim, or from the rim inward, and segment may be of any size or shape, elongated or circular, and even up to almost full top area.



497) Family number: 1281867 (US3955571A)

Title: Rechargeable applicator for **dispensing** substances

Priority: US19740457415 19740403

Family:

Publication number	Publication date	Application number	Application date
CA1066157 A1	19791113	CA19740216623	19741218
DE2514562 A1	19751016	DE19752514562	19750403
DE2514562 B2	19780330	DE19752514562	19750403
DE2514562 C3	19781123	DE19752514562	19750403
GB1473426 A	19770511	GB19750003409	19750127
IT1033445 A	19790710	IT19750020953	19750305
SE418802 B	19810629	SE19740016125	19741220
SE418802 C	19811008	SE19740016125	19741220
SE7416125 A	19751006	SE19740016125D	19741220
US3955571 A	19760511	US19740457415	19740403

Probable Assignee: EMKO CO

Assignee(s):(std)**:** EMKO CO

Assignee(s): EMKO CO ST LOUIS MO V ST A ; EMKO CO THE ; EMKO COMPANY THE ; RUTTER HAROLD T ; SIEGEL JEROME J ; SUNNEN ROBERT M ; THE EMKO CO ; THE EMKO CO ST LOUIS MO V ST A ; THE EMKO COMPANY

Inventor(s):(std)**:** RUTTER H T ; RUTTER HAROLD T ; RUTTER HAROLD THOMAS ; SIEGEL J J ; SIEGEL JEROME J ; SIEGEL JEROME JOSEPH ; SUNNEN R M ; SUNNEN ROBERT M ; SUNNEN ROBERT MILLER

Inventor(s): THOMAS RUTTER HAROLD ; RUTTER HAROLD THOMAS KIRKWOOD ; H T RUTTER ; J J SIEGEL ; JOSEPH SIEGEL JEROME ; MILLER SUNNEN ROBERT ; R M SUNNEN

International class (IPC 8-9): A61M31/00 A61M37/00 B65D83/14 (Advanced/Invention); A61M31/00 B65D83/14 (Core/Invention)

International class (IPC 1-7): A61J1/00 A61M31/00 A61M37/00 B65D83/14 B67D

CPC: A61M31/00 B65D83/386

European class: A61M31/00 B65D83/38E2

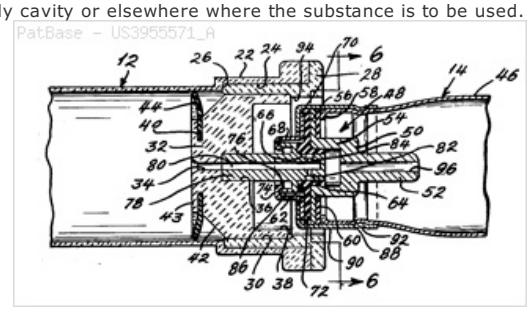
US class: 128/235 604/140

Classification Explorer

Cited documents: US3682175 A, US3677246 A, US3612359 A, US3357427 A, US3161196 A, US3154224 A, US3154076 A, US2763406 A,

Forward Citations: WO06004443, WO06004443, US8122917, US7814943, US6475181, US2011024448, US2007051426,

Abstract:
Source: US3955571A A rechargeable applicator for **dispensing** substances especially substances in a foam or foam-like condition including **dispensing** them into body cavities or elsewhere, the applicator includes a pressurized **container** having one end which is normally closed by a valve and filled with a substance under pressure for **dispensing** therefrom, and cooperatively associated with the **container** is an expandable chamber into which some of the contents of the **container** can be expelled in a foam or foam-like condition when the **container** is withdrawn but not separated from the chamber, the **container** thereafter serving as a plunger for expelling the contents of the chamber into a body cavity or elsewhere where the substance is to be used.



498) Family number: 1179780 (US3910486A)

Title:	Reclosable **container** and blanks therefor
Priority:	US19740458188 19740405 US19740506870 19740917

Family:

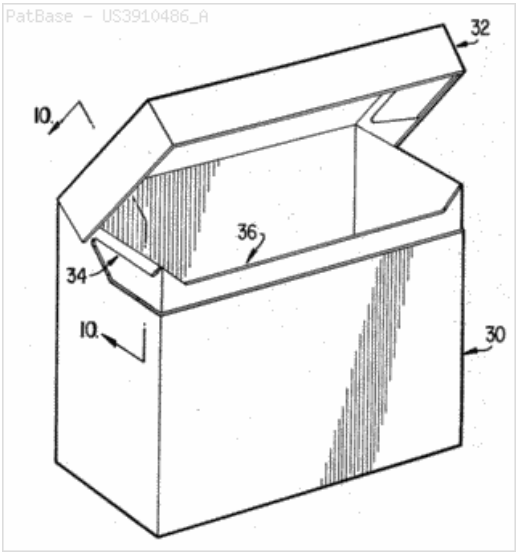
Publication number	Publication date	Application number	Application date
US3910486 A	19751007	US19740458188	19740405
US3963173 A	19760615	US19740506870	19740917

Probable Assignee:	STONE ORISON W
Assignee(s):(std):	STONE ORISON W
Assignee(s):	PACK IMAGE INC
Inventor(s):(std):	STONE ORISON W
International class (IPC 8-9):	B65D5/54 B65D5/64 (Advanced/Invention); B65D5/54 B65D5/64 (Core/Invention)
International class (IPC 1-7):	B65D5/54 B65D5/66 B65D85/10
CPC:	B65D5/5425 B65D5/543 B65D5/544 B65D5/548 B65D5/64
European class:	B65D5/54B3B B65D5/54B3B6 B65D5/54B3D B65D5/54F B65D5/64
US class:	229/131 229/145 229/160.1 229/225 229/44CB 229/51TC

Classification Explorer

Cited documents:	US3794238 A, US3616987 A, US3432090 A, US3426956 A, US3295742 A, US3282492 A, US2963213 A, US2922565 A, US2848153 A, US2848152 A,
Forward Citations:	WO09020383, WO06015972, US9139354, US8459449, US8413801, US7913845, US7523825, US7210612, US7066321, US6871778, US6866189, US6863212, US6860400, US6612473, US6276600, US6155169, US5911359, US5904244, US5875963, US5743462, US5711476, US5673849, US5653384, US5634588, US5551938, US5518172, US5515996, US5505374, US5478011, US5458272, US5439133, US5328091, US5307987, US5154343, US4916884, US4789060, US4732276, US4688677, US4325482, US4294399, US2011155596, US2009188824, US2008237070, US2007199837, US2006202003, US2006071061, US2005257589, US2005127150, US2004195301, US2004195299, US2004178252, US2004060974, US2003189077, US2001052480, FR2790735, FR2668120, FR2661152, FR2658482, FR2596730, FR2578510, FR2436716, EP1151924, EP1136372, EP0454506, EP0443930, DE2841257, DE19648240, DE19648240, DE102005043186,

Abstract:
Source: US3910486A A paperboard blank for a flip-top **container**, a flip-top **container** and a method of assembly are disclosed. The **containers** feature an initially **sealed** flip-top separable along perforations accessibly disposed on the front panel of the **container**. When **opened**, the flip-top exposes an access cutout of an integral internal collar which increases the structural strength of the **container** at certain critical locations. Each side of the **container** is provided with a latch having mating portions which are detachably connected and thus positively aligned during all of the **container** assembly steps to eliminate registry problems between the mating portions of the latches.



499) Family number: 24048641 (US3910119A)

Title:	Recording thermometer
Priority:	US19720253202 19720515 US19810272317 19810610

Family:

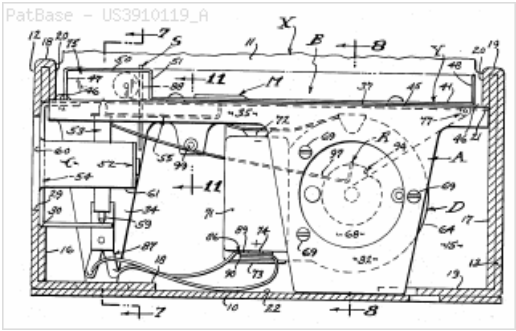
Publication number	Publication date	Application number	Application date
US3910119 A	19751007	US19720253202	19720515
USRE32108 E	19860408	US19810272317	19810610

Probable Assignee:	CARGO GRAPHICS CORP
Assignee(s):(std)**:**	CARGO GRAPHICS CORP
Inventor(s):(std)**:**	MAXWELL WILLIAM H
International class (IPC 8-9):	G01K1/02 (Advanced/Invention); G01K1/00 (Core/Invention)
International class (IPC 1-7):	G01K1/02
CPC:	G01K1/022
European class:	G01K1/02B
US class:	346/33TP 374/186 374/E01.003 374/E1.003

Classification Explorer

Cited documents:	US3787885 A, US3388404 A, US3291920 A, US3221321 A, US3200403 A, US3176083 A, US3140144 A, US2557437 A, US2060984 A, US1443732 A, GB3089, GB188703089 A, DE330205 A,
Forward Citations:	US7004621, US5760697, US5745127, US5167453, US4996909, US4135400, US4044362, US2005281311, EP0290214, EP0290214,

Abstract:
Source: US3910119A A thermograph for automatically recording variations of temperature correlated with the passage of time and characterized by a light weight and durable construction protectively combined with a shipping **container** which serves as a housing enclosing the instrument while exposing a heat transfer element for quick response and a direct recording of prevailing temperature upon a chart. The instrument is a permanent and reuseable **unit** that is carried within the expendible shipping **container** to produce a thermogram from a prepared chart of pressure sensitive material that is transported over a thermometer stylus by means of a clock motor drive.



500) Family number: 1453763 (US4060453A)

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Title: NUCLEAR REACTOR INSTALLATION

Priority: DE19742430724 19740626 DE19742446044 19740926 DE19772757135 19771221 DE19752519346 19750430 DE19752536199 19750813 DE19752519376 19750430 GB19750026045 19750618 US19750590672 19750626

Family:

Publication number	Publication date	Application number	Application date
BE830608 A	19751016	BE19750157650	19750625
BE841278 A4	19760816	BE19760166569	19760429
BE841278 R	19760816	BE19760166569	19760429
BE844910 A4	19761201	BE19760169580	19760805
BE844910 R	19761201	BE19760169580	19760805
BR7600864 A	19770830	BR19760000864	19760211
BR7601435 A	19761130	BR19760001435	19760310
BR7604063 A	19770628	BR19760004063	19760623
CH580858 A	19761015	CH19750007974	19750619
CH584959 A	19770215	CH19760004215	19760405
CH585456 A	19770228	CH19760006830	19760601
CH588147 A	19770531	CH19760004404	19760407
DE2430724 A1	19760115	DE19742430724	19740626
DE2430724 B2	19771013	DE19742430724	19740626
DE2430724 C3	19780608	DE19742430724	19740626
DE2446044 A1	19760401	DE19742446044	19740926
DE2446044 B2	19800214	DE19742446044	19740926
DE2446044 C3	19801218	DE19742446044	19740926
DE2519346 A1	19761104	DE19752519346	19750430
DE2519346 C2	19840112	DE19752519346	19750430
DE2519376 A1	19761104	DE19752519376	19750430
DE2519376 C2	19830922	DE19752519376	19750430
DE2536199 A1	19770217	DE19752536199	19750813
DE2757135 A1	19790628	DE19772757135	19771221
ES447368 A1	19771201	ES19760447368	19760427
ES447369 A1	19771201	ES19760447369	19760427
ES450682 A1	19771216	ES19760450682	19760813
FR2276666 A1	19760123	FR19750018740	19750616
FR2276666 B1	19830225	FR19750018740	19750616
FR2309958 A2	19761126	FR19760005908	19760302
FR2309958 B2	19830429	FR19760005908	19760302
FR2321177 A2	19770311	FR19760022130	19760720
FR2321177 B2	19830527	FR19760022130	19760720
GB1513775 A	19780607	GB19750026045	19750618
GB1514074 A	19780614	GB19760017569	19760429
GB1546685 A	19790531	GB19760033138	19760809
IT1063024 A	19850211	IT19760022678	19760427
JP51017799 A2	19760212	JP19750078560	19750624
JP51130794 A2	19761113	JP19760047611	19760426
JP52022695 A2	19770221	JP19760095339	19760810
JP53021012 A2	19780227	JP19770093733	19770804
JP58165699 U1	19831104	JP19830036770U	19830314
JP59037758 Y2	19841019	JP19830036770U	19830314
NL7506517 A	19751230	NL19750006517	19750602
SE414978 B	19800825	SE19750006801	19750613
SE414978 C	19801211	SE19750006801	19750613
SE7506801 A	19751229	SE19750006801D	19750613
SE7608920 A	19770214	SE19760008920D	19760810
US4060453 A	19771129	US19760679078	19760421
US4092214 A	19780530	US19760711471	19760804
US4096881 A	19780627	US19750590674	19750626
US4238290 A	19801209	US19780869628	19780116

Probable Assignee: KRAFTWERK UNION AG

Assignee(s):(std)**:** KRAFTWERK UNION AG ; MANNESMANN AG

Assignee(s): KRAFTWERK UNION AKTIENGESELLSCHAFT TE MUELHEIM BONDSREPUBLIEK DUITSLAND ; KRAFTWERK UNION TE MUELHEIM BONDSREPUBLIEK DUITSLAND AG ; KRAFTWERK UNION AG 4330 MUELHEIM ; KRAFTWERK UNION AG 4330 MUELHEIM DE ; KRAFTWERK UNION AKTIENGESELLSCHADFT ; KRAFTWERK UNION AKTIENGESELLSCHAFT ; KRAFTWER UNION AG ; KRAFTWER UNION AKTIENGESELLSCHAFT ; KRAFTWERK UNION 4330 MUELHEIM AG ; KRAFTWERK UNION 4330 MUELHEIM DE AG

Inventor(s):(std)**:** HANSUPEETAA SHIYAABERUTO ; HOFFMANN J ; HOFFMANN JORGEN ; HOFFMANN JUERGEN ; ERUUIN RAURAA ; LAURER E ; LAURER ERWIN ; SCHABERT H ; SCHABERT H P ; SCHABERT HANS PETER ; SCHABERT HANS PETER DIPL ING ; SCHARBERT H P ; YURUGEN HOFUMAN ; KURAUSU FURENKEN ; HANSUPEETAA SHAABERUTO ; HANSU SHIYUREEBUE ; ERUIN RAURAA

Inventor(s): LAURER ERWIN 8521 MOEHRENDORF DE ; LAURER ERWIN 8521 MOEHRENDORF ; H P SCHABERT ; J HOFFMANN ; E LAURER

International class (IPC 8-9): B22D11/128 B22F5/00 C21D1/18 C22C38/00 F16K17/10 F16K17/168 F16K31/122 G05D16/14 G21C13/10 G21C9/00 G21D1/00 G21D3/04 G21D3/06 (Advanced/Invention); B22D11/128 B22F5/00 C21D1/18 C22C38/00 F16K17/02 F16K17/04 F16K31/122 G05D16/00 G21C13/00 G21C9/00 G21D1/00 G21D3/00 (Core/Invention)

International class (IPC 1-7): B22D11/00 B22F7/04 C21D1/62 C21D9/38 C22C33/02 F16K17/00 F16K17/02 F16K31/12 F16K31/122 F16K31/124 F16K35/00 G21C13/00 G21C15/18 G21C3/04 G21C9/00 G21D1/00 G21D1/02 G21D1/04 G21D3/04 G21D3/06

CPC: Y10T137/87378 F16K31/122 F16K17/168 Y10T137/7769 F16K17/10 G21C9/00 G21D3/04 G21D3/06 Y02E30/32 Y02E30/40 F16K17/34 F16K31/1225 F16K31/363 F16K17/00

European class: F16K17/10 F16K17/168 F16K31/122 G05D16/14 G21C9/00 G21D3/04 G21D3/06 Y02E30/32 Y02E30/40

US class: 137/492 137/599.16 176/38 251/25 251/62 376/250 376/277 376/281 376/283 976/DIG.299

Classification Explorer

Cited documents: US981313 A, US451846 A, US3874404 A, US3811279 A, US3734134 A, US3714953 A, US3631893 A, US3605808 A, US3597016 A, US3529630 A, US3469503 A, US3446171 A, US3431168 A, US3410518 A, US3400049 A, US3384550 A, US3245325 A, US3225544 A, US3187637 A, US3186169 A, US3155365 A, US3149537 A, US3140588 A, US3081919 A, US2989072 A, US2728547 A, US2584847 A, US2520893 A, US2333274 A, US2274663 A, US1482233 A, US1181111 A, FR2031232 A5, FR1586381 A, DE2409867 A1, DE2345580 A1, DE1116006 B, DE1078395 B, DE1047150 B,

Forward Citations: WO9402435, WO02075192, US9891144, US9689315, US9133941, US9091429, US8714515, US6328278, US6010112, US5848779, US5517538, US5280506, US5028383, US4869458, US4777013, US4669585, US4490836, US4469051, US4285770, US4280871, US4259156, US4245412, US2017108413, US2016169030, US2013056666, US2012247564, US2011155250, US2009255745, JP63242463, JP63036254, JP62068666, JP62068665, JP54153996, JP4047294, JP2014529717, FR2315050, EP2740126, EP2740126, EP0708749, DE4206660, DE3526377, DE3226274, DE3141444, DE3029394, DE2747029, DE19821756, DE10320366, DE10320366, DE102014224567, CN105757320,

Abstract:
Source: US4060453A In a nuclear reactor installation having a containment shell, a live steam line leading outwardly from the containment shell, a fast-acting shut-off valve connected in the steam line and having a flow cross section corresponding to the cross section of the steam line, the shut-off valve including a normally **open** main valve disk which is actuatable to close in response to pressure from a leak in the steam line, pressure dependent means associated with the main valve disk for sensing a pressure higher than operating pressure of the steam line, an **opening** mechanism includes a piston-actuated auxiliary valve disk disposed in a cut-out formed in the main valve disk and having an area equal at most to one-half the flow cross-sectional area of the shut-off valve, the auxiliary valve disk being operable by the pressure-dependent means to **open** the cut-out **opening** when a pressure higher than operating pressure of the steam line is sensed by the pressure dependent means.

