



(11) **EP 3 090 960 B1**

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention
of the grant of the patent:
28.11.2018 Bulletin 2018/48

(51) Int Cl.:
B65D 77/24 ^(2006.01) **B65D 77/28** ^(2006.01)
A47G 21/02 ^(2006.01)

(21) Application number: **13900698.5**

(86) International application number:
PCT/CL2013/000099

(22) Date of filing: **30.12.2013**

(87) International publication number:
WO 2015/100504 (09.07.2015 Gazette 2015/27)

(54) **CONTAINER COMPRISING A COMPLEMENTARY SYSTEM FOR PROVIDING TOOLS OR IMPLEMENTS FOR USE OR CONSUMPTION OF ITS CONTENTS**

BEHÄLTER MIT EINEM ERGÄNZENDEN SYSTEM ZUM BEREITSTELLEN VON WERKZEUGEN
ODER HILFSMITTELN ZUM NUTZEN ODER VERZEHR DES INHALTES

CONTENANT AVEC SYSTÈME COMPLÉMENTAIRE POUR METTRE À LA DISPOSITION DES
OUTILS OU DES AIDES PERMETTANT L'UTILISATION OU LA CONSOMMATION DE LEUR
CONTENU

(84) Designated Contracting States:
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO RS SE SI SK SM TR**

US-A- 6 131 763 US-A1- 2012 148 710
US-A1- 2012 285 845 US-B2- 6 491 184

(43) Date of publication of application:
09.11.2016 Bulletin 2016/45

(73) Proprietor: **Gutiérrez Lema, Patricio**
Ñuñoa, Santiago CP 7750000 (CL)

(72) Inventor: **Gutiérrez Lema, Patricio**
Ñuñoa, Santiago CP 7750000 (CL)

(74) Representative: **ZBM Patents - Zea, Barlocchi &
Markvardsen**
Plaza Catalunya, 1 2nd floor
08002 Barcelona (ES)

- DATABASE WPI Week 201008, Derwent Publications Ltd., London, GB; AN 2010-A52818, XP055293049 'Storage tank, has tank cover fitting tank body, where side of inner wall of opening of tank body is provided with convex column for hanging spoon, and spoon handle opened with hanging hole fitting convex column' & CN 201 367 150 Y (CHINA ROOTS PACKAGING PRIVATE) 23 December 2009
- DATABASE WPI Week 201042, Derwent Publications Ltd., London, GB; AN 2010-G59243, XP055293055 'Spoon, has handle provided on lateral side of spoon body, where end part of handle comprises clamping fastener sleeve, and side wall of clamping fastener sleeve is provided with clamping fastener' & CN 201 480 928 U (DAHAI WANG) 26 May 2010

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Description

Technical Sector

[0001] This invention belongs to the packaging industry and containers in general.

State of the art

[0002] In general, containers or packages (cans, drums, plastic containers, cardboard etc.) whose contents require an additional tool or implement for use or consume do not include a tool or utensil. There are some exceptions in the case of food such as ice cream, soups or yogurts, in which a spoon is included on the outside of the container or is given to the user when purchasing the unit to be consumed. In most of the cases this supplementary item is not included and the user must solve its absence.

[0003] A typical case, to mention one of many, is the can of paint, which requires a certain rod suitable to stir its contents before using it. Users should spend valuable resources (time, money) to deal with this classic dilemma, which includes among its solutions, to pull out a tree branch.

[0004] GB2350598A is related to beverage containers having drinking straws. It discloses a telescopic drinking straw, wherein the internal pressure, caused by the carbonization of the liquid, drives the plunger part of the straw upwards out of the sleeve part of the straw.

[0005] DE202008007242U1 discloses a drinking aid for a drinking vessel, wherein a straw is telescoped into a drinking position by means of a spring.

[0006] US6131763A is related to a beverage container and dispenser apparatus. It discloses a drinking straw that is presented to the user after aperture of an opening associated to the straw.

[0007] US5431297A is related to a pop-up straw for beverage containers. It discloses a telescopic straw assembly including interior and exterior straws; the interior straw extends out of the mouth of the beverage container once the container is opened; and a floater, having less density than that of the liquid in the container, urges the telescopic straw assembly to protrude out of the container's mouth.

[0008] JPH09278037A is related to a straw built-in type beverage can having lid. It discloses a stretchable straw which extends upward from an opening in a seal. The straw can be fully removed from the container, because the straw is not attached to the container.

[0009] US6491184B2 is related to a container equipped with a device for automatically extracting a straw and associated method. It discloses a device for opening the container and a straw arranged in the interior of the container. The device includes a straw supporting element movable between a free position and a locked position. The straw can emerge if the device is in the free position and the lid is opened.

[0010] Each of the abovementioned documents includes a sleeve-plunger mechanism that is activated by compressed gas or a spring. It is noted that a straw is intended to consume only liquid contents, not being useful for viscous products as food or paint. Also, with the exception of JPH09278037A, the straw cannot be removed from the container without damaging the system by separation of the parts forming the sleeve-plunger mechanism that enables the straw to emerge.

[0011] US5042712A discloses a container comprising a complementary system providing a user with a tool to consume the content of the container. The tool is stored inside the container while the container is closed and can be removed from the container when the container is opened. In specific, it describes that the utensil is stored in a sealed pocket, needed to prevent contamination of the pocket and the utensil stored inside it with the content of the container.

[0012] The sealed pocket can be considered to be a rail which keeps the tool in position when the container is closed and which enables an easy removal of the tool when the container is opened, for which the user takes a handle with is part of tool.

[0013] However, in the present proposal, there is no need of a sealed pocket, because the part of the tool which forms the handle for the user to take is part of a retractable sleeve-plunger mechanism.

[0014] DE102009042498A1 and DE19942381A1 include examples of telescopic spoons having a retractable sleeve-plunger mechanism. It is noted that these telescopic spoons are designed to be deployed manually, which makes them inappropriate to be in direct contact with aqueous products, that is to say, for the purpose aiming the present invention.

Disclosure of the Invention

[0015] A system has been designed that complements the package or container, providing the user with the tool or utensil inside it, so that when opened, a mechanism will enable such a tool or utensil to emerge from the surface level of the contents of container or package, ready for the user to use, for example, for consume (for food), stirring (in the case of a paint can), from one side or lateral space, etc, as its convenience.

[0016] The mechanism to enable the tool or utensil emerges from the level of the package or container, so that the user can immediately use it, consists of a retractable sleeve-plunger type which is deployed at the time of opening the package or container, forming the tool or utensil required; and the tool or utensil is driven to emerge from a pressure of an inert compressed gas at the bottom of the mechanism, a torsion spring or any ejector system.

Brief description of the drawings

[0017] Figure 1 is a complementary system for yogurt containers in side view with its lid open which shows,

emerging from inside, the extended retractable handle of a spoon. The system is conveniently attached to one of the side inner walls. Below, there is a complementary top view that lets you see the position of the system.

[0018] The system has a hollow outer body (1), with the implement or tool, in this case a spoon (2), in its lower part, and an inner body or handle (3) that slides within the outer body (1). The handle (3) is shown fully extended and fixed at the end of its travel by a self-locking mechanism (6) that allows forming the spoon.

[0019] The container (5) has a rail or compartment (4) so that the implement (7) located inside the container is kept in the desired position while the package or container is closed, and is easily removed when the package or container is opened.

[0020] References (8) and (9) show complementary views of the implement (7) extended forming a spoon, in front and side views.

[0021] References (10) and (11) show complementary views of the implement (7) with the handle stored, in front and side views.

[0022] Figure 2 shows an application of the complement system for paint cans, which in this case stores inside a paddle for stirring or mixing paint.

Best way to make the invention

[0023] It is disclosed a container comprising a complementary system according to claim 1.

[0024] In addition, the lid of the container (5) acts at the same time as a lid for the system that stores the tool (7), that is to say, as lid of a hollow outer body (1) with the handle (3) retracted inside it, keeping the handle (3) clean and not contaminated by the contents of the container (5).

[0025] The retractable sleeve-plunger mechanism has a self-locking mechanism (6) in a part of its relative travel, so that when the handle (3) of the tool (7) emerges from the inside of the container (5) and is fully extended it allows forming the tool (7).

[0026] The retractable sleeve-plunger mechanism forming the tool (7) comprises a guiding device which allows the handle (3) to slide with respect to the bottom of the tool (7).

[0027] In some useful embodiments tool (7), once extended, is a spoon or a paddle.

Industrial application

[0028] The container comprising a complementary system can be used in all types of industries, areas or applications where such packaging or containers require additional tools or utensils that allow its use.

Claims

1. A container comprising a complementary system

providing a user with a tool (7) to use, consume, carry, or expel content of the container (5), so that while the container is closed the tool is stored inside it and when the container is opened, by opening a lid, a part of the tool emerges from the surface level of the contents of the container thanks to a retractable sleeve-plunger mechanism which is activated by a compressed inert gas, a spring or an ejector system that drives the retractable sleeve-plunger mechanism when removing the lid thereby forming the tool (7), wherein the container comprises a rail (4) in the container so that the tool is kept in position while the container is closed, and the rail (4) enables an easy removal of the tool (7) when the container is opened, for which the user takes a handle (3) which is the part of the tool that emerges from the surface level of the contents of the container.

2. The container comprising a complementary system, according to claim 1, **CHARACTERIZED in that** the lid of the container (5) acts at the same time as a lid for the system that stores the tool (7), that is to say, as lid of a hollow outer body (1) with the handle (3) retracted inside it, keeping the handle (3) clean and not contaminated by the contents of the container (5).

3. The container comprising a complementary system, according to claim 1, **CHARACTERIZED in that** the retractable sleeve-plunger mechanism has a self-locking mechanism (6) in a part of its relative travel, so that when the handle (3) of the tool (7) emerges from the inside of the container (5) and is fully extended it allows forming the tool (7).

4. The container comprising a complementary system, according to claim 1, **CHARACTERIZED in that** the retractable sleeve-plunger mechanism forming the tool (7) comprises a guiding device which allows the handle (3) to slide with respect to the bottom of the tool (7).

5. The container comprising a complementary system, according to claim 1, **CHARACTERIZED in that** the tool (7), once extended, is a spoon.

6. The container comprising a complementary system, according to claim 1, **CHARACTERIZED in that** the tool (7), once extended, is a paddle.

Patentansprüche

1. Ein Behälter welcher ein komplementäres oder zusätzlichen System umfasst und wehren dem Gebraucher oder Benutzer der Behälter die Anwendung eines Werkzeuge ermöglicht, für die Benutzung, den Konsum, den Transport oder dem Aus-

stoß des Inhaltes des Behälters zu der ermöglichen (5), und zwar derart, dass Werkbund de geschlossenen Behalten, dieses Werkzeug sin dem Inneren des Behältern befindet und sobald der Behälter geöffnet ist, in dem der Deckel geöffnet wird, ein Teil des Werkzeug sind, bezüglich der Oberfläche herausebet, mit Hilfe aus zurückziebaren Mechanismus, besteband aus einem Kolben oder Stampe mit einem Überzug oder Hülle, welchen mit Hilfe Union inerten Druckgase aktiviert wird, einer Druckfeder oder einem Autom - Systems, wobei dieses System diesen gesamte zurückziebaren Wölben Überzug Mechanismus, bei einem Öffnen des Behältern, bewegen, und somit das Werkzeug bilden, dadurch gehengezeichnet, das des Behälter eine Schiene (4) umfasst, welche des Werkzeug in seiner Inhalt einem der Behälter geschlossen ist, und wo die Schiene (4) ein einfarbres herrausheber des Werkzeugs (7), wärmend der Öffnens des Behältern ermöglicht damit der Benutzer einen Griff (3) esperfen kann, welcher den Teil des Werkzeugs bildet, welches aus der Oberfläche des Inhalts des Behälters

2. Der Behälter welchen ein komplementären System umfasst nach Anspruch 1, **dadurch gekennzeichnet, dass** der Dadurch des Behälters (5) gleichzeitig der Deckel für das System ist, welchen das Werkzeug beinhaltet (7), das als Deckel union, aufbewahrt einen hohlen äußeren Körper (1) mit dem zurückgezogenen Griff (3), in einem Innern, wodurch dieses Griff (3) sauber gehalten wird, ohne mit dem Innern des Behälters (5) im Berührung zu kommen.
3. Der Behälter welcher ein komplementären System umfasst nach Anspruch 1, **dadurch gekennzeichnet, dass** der versenkbare Kolben mit dem Überzug des Mechanismus ein selbsthemmenden Mechanismus (6) und zwar um einem Stelle seiner relativen Bewegung, so dass der Griff (3) des Werkzeugs (5) aus dem Inneren des Behälters (5) aus dem inneren und eine vollständig lange erreicht hat, die Bildung oder Ausformung des Werkzeugs (7) ermöglicht.
4. Der Behälter welcher ein komplementäres System umfasst, nach Anspruch 1, **dadurch gekennzeichnet, der** Mechanismus bestehend aus dem zurückziebaren Kolben und dem Überzug, welchen das Werkzeug (7) bildet, ein Führungsvorrichtung Element aufweist welches eine gleitende Beregnung das Griffen (3) in Bezug zu dem unteren Fail des Werkzeugs ermöglicht.
5. Der Behälter welcher ein komplementäres System umfasst, nach Anspruch 1, **dadurch gekennzeichnet, dass** entfalteter Werkzeug (7), sobald es ausgefahren ist, ein Löffel ist
6. Der Behälter welcher ein komplementäres System

umfasst nach Anspruch 1, **dadurch gekennzeichnet, dass** entfalteter Werkzeug (7), sobald es ausgefahren ist, ein Paddel ist.

Revendications

1. Un contenant comprenant un système complémentaire qui fournit à l'utilisateur un instrument (7) pour utiliser, consommer, transporter ou expulser le contenu du contenant (5), de telle sorte que, tant que le contenant est fermé, l'instrument est entreposé à l'intérieur de ce dernier, et lors de l'ouverture du contenant, lorsque l'on soulève un couvercle, une partie de l'instrument dépasse du niveau de la surface du contenu du contenant grâce à un mécanisme de gaine-piston rétractile activé par un gaz inerte comprimé, un ressort ou un système expulseur qui enclenchera le mécanisme de gaine-piston rétractile au moment où l'on ouvre le couvercle, conformément ainsi l'instrument (7), **CARACTÉRISÉ en ce que** le contenant comprend un rail (4) permettant à l'instrument de rester en place tant que le contenant est fermé, et que le rail (4) permet une extraction facile de l'instrument lors de l'ouverture du contenant, au moyen d'un manche (3) dont se saisit l'utilisateur et qui est la partie de l'instrument qui dépasse du niveau de la surface du contenu du contenant.
2. Le contenant comprenant un système complémentaire répondant à la revendication 1 et **CARACTÉRISÉ en ce que** le couvercle du contenant (5) agit à la fois comme couvercle du système qui renferme l'instrument (7), c'est-à-dire, comme couvercle d'un corps extérieur creux (1) à l'intérieur duquel le manche (3) est rétracté, et qui conserve ce manche (3) propre et non souillé par le contenu du contenant (5).
3. Le contenant comprenant un système complémentaire répondant à la revendication 1 **est CARACTÉRISÉ en ce que** le mécanisme de gaine-piston rétractile possède un système d'auto-blocage (6) sur l'un des points de son parcours relatif, de sorte que lorsque le manche (3) de l'instrument (7) sort de l'intérieur du contenant (5) et s'étend complètement, il permet de former l'instrument (7).
4. Le contenant comprenant un système complémentaire répondant à la revendication 1 **est CARACTÉRISÉ en ce que** le mécanisme de gaine-piston rétractile qui conforme l'instrument (7) comprend un dispositif de glissières qui permet que le manche (3) se déplace par rapport à la partie inférieure de cet instrument (7).
5. Le contenant comprenant un système complémentaire répondant à la revendication 1 **est CARACTÉRISÉ en ce que** l'instrument (7), une fois étiré, est

une cuillère.

6. Le contenant comprenant un système complémentaire répondant à la revendication 1 **est CARACTÉRISÉ en ce que** l'instrument (7), une fois étiré, est un bâtonnet.

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FIGURE 1

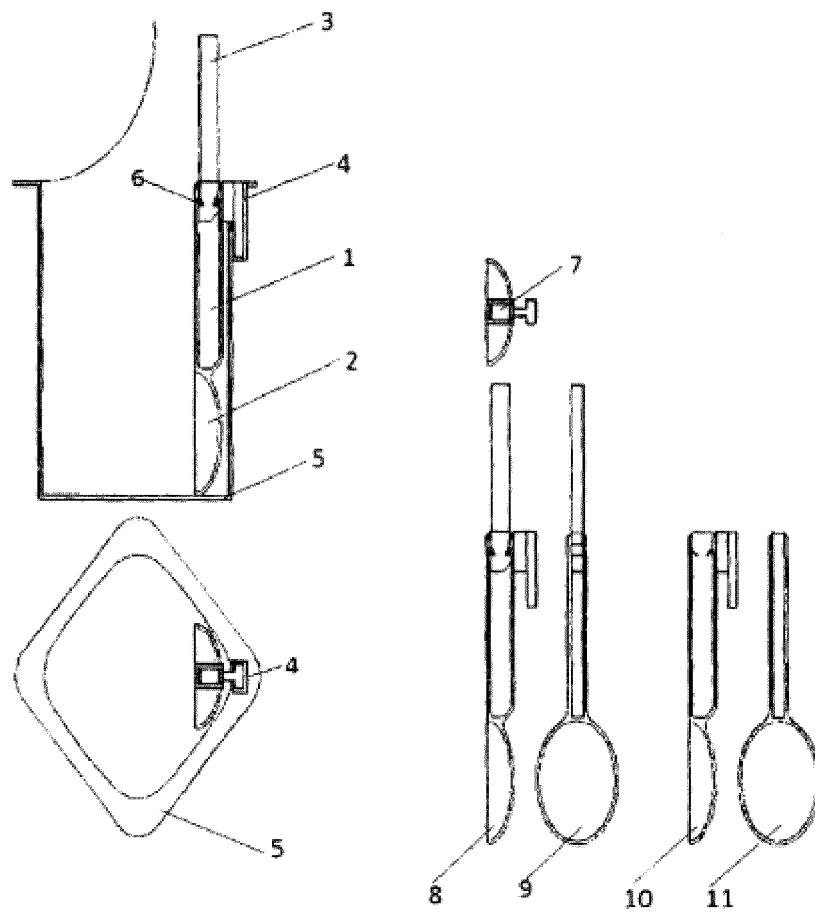
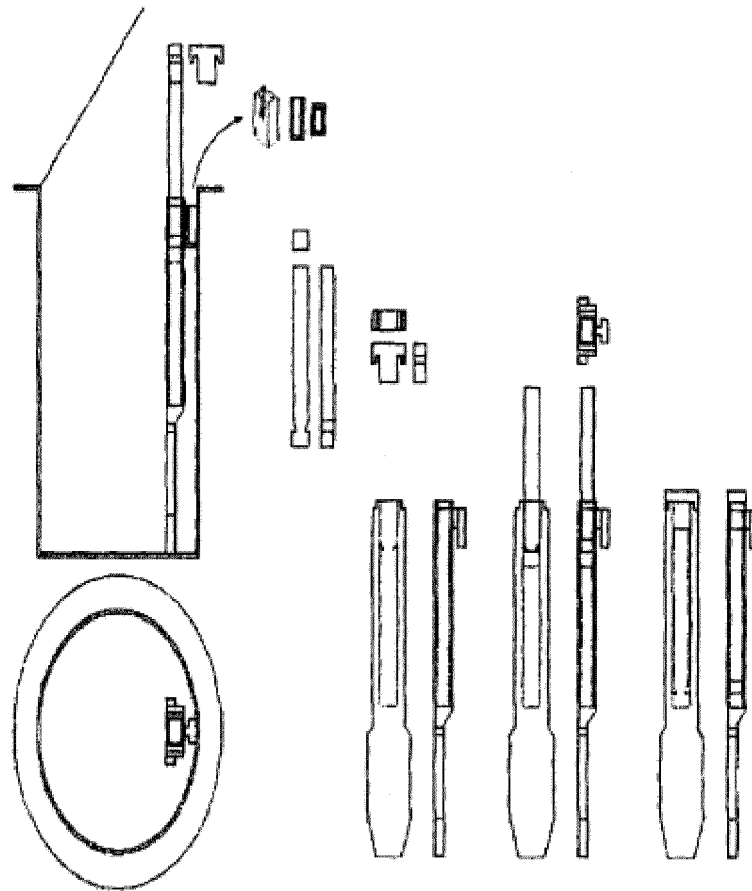


FIGURE 2



REFERENCES CITED IN THE DESCRIPTION

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