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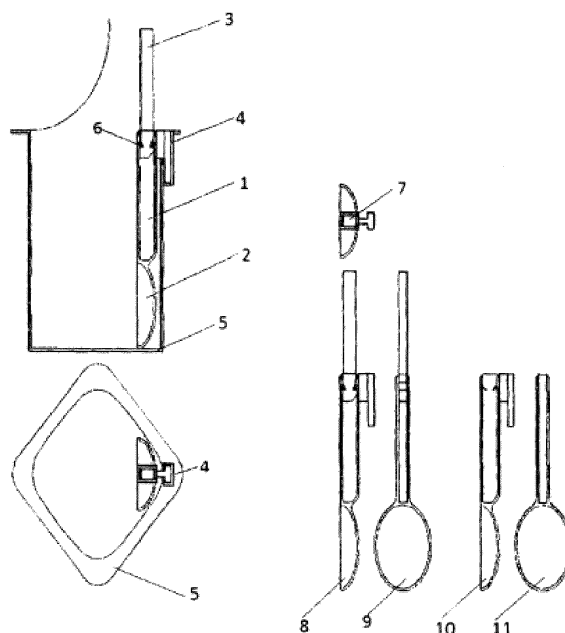
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(54) **COMPLEMENTARY SYSTEM FOR CONTAINERS THAT REQUIRE THE USE OF TOOLS OR
UTENSILS IN ORDER FOR THE CONTENTS OF THE CONTAINER TO BE USED OR CONSUMED**

(57) The invention relates to a complementary system for packaging or containers. The system consists of a device conveniently housed inside the packaging or container, said device storing therein a tool or utensil that is removed when the lid is opened and formed for use by means of a self-locking, retractable sleeve-plunger

type mechanism. The complementary system for packaging or containers is suitable for use in all types of industries, business lines or applications in which packaging or containers require additional tools or utensils for the use thereof.

FIGURE 1



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, ardbord 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.

Disclosure of the Invention

[0004] 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 the container or package, ready for the user to use, for example, for consuming (for food), stirring (in the case of a paint can), from one side or lateral space, etc. as it is convenient.

[0005] 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, may consist of a retractable sleeve-plunger type which is deployed at the time of opening the package or container, forming the tool or utensil required; it can also be a similar system, in which the tool or utensil is driven to emerge by the pressure of an inert compressed gas at the bottom of the mechanism, a spring or any ejector system.

Brief description of the drawings

[0006] 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.

[0007] The system has a hollow outer body (1), with the implement or tool, in this case a spoon (2), in its lower part, constituting an inner body that slides within an outer body. 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.

[0008] 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.

[0009] References (8) and (9) show complementary views of the implement (7) extended forming a spoon, in front and side views.

[0010] References (10) and (11) show complementary views of the implement (7) with the handle stored, in front and side views.

[0011] Figure 2 shows an application of the complementary system for paint cans, which in this case stores inside a paddle for stirring or mixing paint.

[0012] Best way to make the invention.

[0013] A complementary system for packaging or containers consists in a mechanism which is conveniently lodged inside the container or package, storing therein a tool or utensil which emerges and is formed, for its use, at the moment of opening, by a self-retractable sleeve-plunger mechanism.

Industrial application

[0014] This complementary system for containers or packages 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. Complementary system for packaging or containers **CHARACTERIZED by** a device that is stored inside these packaging or containers, and is exposed when opening the lid or cover, forming a tool or utensil to use, consume, move, carry, or expel content, using a retractable sleeve-plunger mechanism.
2. Complementary system for packaging or containers, according to claim No. 1, **CHARACTERIZED in that** the mechanism which enables the tool or utensil to emerge, so that the user can take it and use it, can be activated by a compressed inert gas that drives the sleeve-plunger assembly when removing the cover or lid, forming the required tool or utensil.
3. Complementary system for packaging or containers, according to claim No. 1, **CHARACTERIZED in that** the lid or cover of the containers or packaging acts at the same time as a lid or cover for the system that stores the tool or utensil, keeping it clean and not contaminated by the contents of the packaging or container.
4. Complementary system for packaging or containers,

according to claims No. 1 and No. 3, **CHARACTERIZED in that** the mechanism that stores the tool or utensil can have its own seal, protective cover or chamber to avoid being contaminated by the content.

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5. Complementary system for packaging or containers, according to claims No. 1, No. 2 and No. 3, **CHARACTERIZED in that** the sleeve - plunger mechanism has a self-locking device in a part of its relative travel, allowing it to form a tool or utensil.

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6. Complementary system for packaging or containers, according to claims No. 1 and No. 3, **CHARACTERIZED in that** the mechanism forming the tool or utensil can be constituted by a guiding device which allows the part forming the handle to slide with respect to the bottom of the tool or utensil.

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FIGURE 1

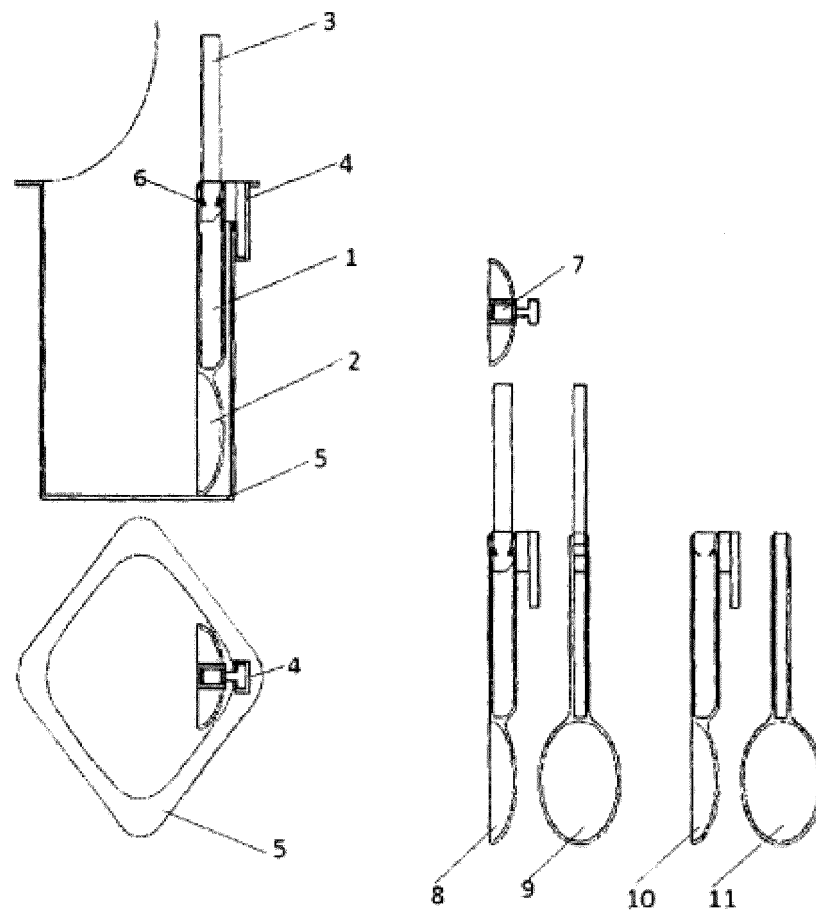
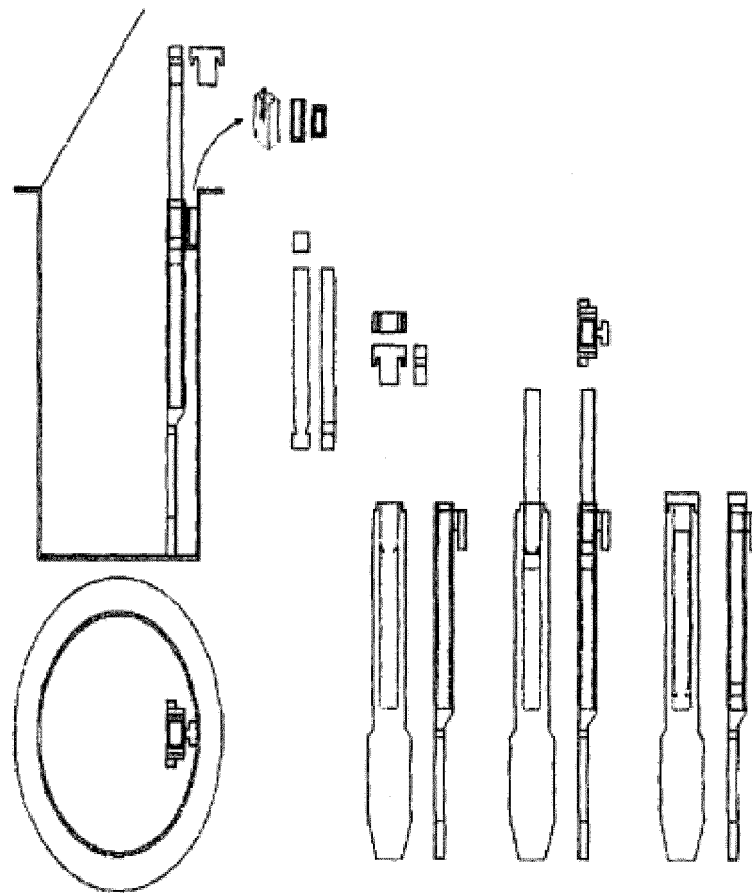


FIGURE 2



INTERNATIONAL SEARCH REPORT

International application No.
PCT/CL2013/000099

A. CLASSIFICATION OF SUBJECT MATTER

B65D77/28 (2006.01)**A47G21/02** (2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

B65D, A47G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPODOC, INVENES, WPI

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 202008007242U U1 (PANAGIOTOPOULOS HARALAMBOS) 19/03/2009, abstract; figures.	1-3
Y		4-6
Y	DE 3242257 A1 (HERTEL REINHARD) 17/05/1984, figures 14 and 15.	4
Y	CN 201367150Y Y (CHINA ROOTS PACKAGING PRIVATE) 23/12/2009, figures & abstract from base of datos WPI. Retrieved from EPOQUE; AN 2010-A52818.	5,6
X	DE 20103746U U1 (BRAUN PETER) 28/02/2002, the whole the document.	1,3,5,6
X	CN 201480928U U (DAHAI WANG) 26/05/2010, figures & abstract from DataBase WPI. Retrieved of EPOQUE; AN 2010-G59243	1-3

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

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considered to be of particular relevance."E" earlier document but published on or after the international
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cannot be considered to involve an inventive step when the
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Date of the actual completion of the international search
13/02/2014Date of mailing of the international search report
(17/02/3014)

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/CL2013/000099

C (continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of documents, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Form PCT/ISA/210 (patent family annex) (July 2009)