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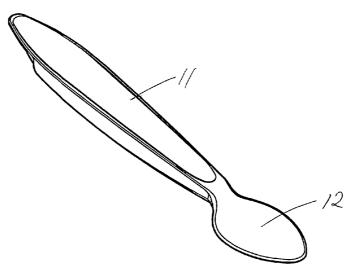
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(54) Title: A DISPENSING UTENSIL



(57) Abstract: The present invention is a dispensing utensil (10) having a conventional implement end (12) and a sealable chamber (15) containing ingredients in the handle (11). The dispensing utensil can be manufactured, filled and assembled relatively more easily and cheaply than tube-shaped dispensing utensils because of the use of a two part pliable top wall (19) and a substantially shell shaped elongate handle body.

A DISPENSING UTENSIL

FIELD OF INVENTION

The present invention relates to utensils that can store and dispense a liquid or solid. The present invention particularly but not exclusively is directed to dispensing spoons. Reference to dispensing spoons in the body of the specification is by way of example only and the present invention is not limited to a dispensing spoon. The term utensil within the specification includes a spoon, fork, knife, stirrer and any suitable instrument or implement.

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BACKGROUND OF THE INVENTION

Spoons that can store and dispense ingredients have been developed to provide convenience and an alternative to the awkwardness of using separate items. The developed dispensing spoons dispense ingredients from the bowl of the spoon. The ingredients are stored in the spoon handle (such as US6675482, US5491895 and US5154318) or within the bowl of the spoon (such as US3911578, US3946652 and US4338338). These dispensing spoons suffer one or more of the following disadvantages including being expensive to manufacture, not suitable for reuse, unable to reclose the container portion and aesthetically unappealing.

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OBJECT OF THE INVENTION

It is an object of the present invention to provide an alternative dispensing utensil that overcomes at least in part one or more of the above mentioned disadvantages.

SUMMARY OF THE INVENTION

In one aspect the present invention broadly resides in a dispensing utensil including

an implement portion; and

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a handle portion, said handle portion includes an elongate body with a recess formed by opposing side walls that are substantially similar in height, said handle portion also includes a pliable top wall locatable over the elongate body to form a sealed container for storing one or more dispensable items.

Said elongate body preferably has elongate opposing side walls. Said elongate body preferably has an elongate shell shape. More preferably the elongate body is substantially U-shaped. Said elongate body is preferably made of plastics. Said elongate body preferably has comparatively thinner side walls than a tubular shaped elongate body.

Said elongate body has opposing side walls that are substantially similar in height and preferably have a substantially flat upper surface for locating the top wall.

The top wall is preferably sealable to the elongate body to form a substantially flat top surface. The top wall preferably has a substantially flat top surface that is aesthetically pleasing and provides a degree of familiarity to holding a conventional implement. The top wall preferably comprises of foil, film, plastic coated paper or any other suitable pliable material. The upper surface of the top wall may have suitable information such as instructional or product information, graphics, branding and or advertising. In one preferred form the top wall has a substantially clear window section to view the dispensable items.

In another aspect the invention broadly resides in a dispensing utensil including

an implement portion; and

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a handle portion, said handle portion includes an substantially rigid elongate body and a pliable top wall, said elongate body has a recess bordered by elongate opposing side walls that are substantially similar in height and have a substantially flat upper surface for fixing a top wall, said elongate body has a substantial shell-like shape or U-shape, said pliable top wall locatable over the elongate body to form a sealed container for storing one or more dispensable items.

The use of a pliable top wall with a substantially shell shaped elongate body provides the advantage that the utensil can be manufactured relatively more easily and cheaply than tube-shaped dispensing utensils. The use of a pliable top wall subsequently sealed to a substantially shell shaped elongate body provides the advantage that dispensable items can be added more efficiently to the utensil than current methods of end filling. The use of a pliable top wall with a substantially shell shaped elongate body also provides the advantage that the amount of contents dispensed can be controlled by depressing the top wall thereby limiting the amount of contents dispensed from the lid portion. The shell shaped elongate body enables multiple utensils without a top wall to nest providing packaging and transport efficiencies.

The one or more items may be dispensed from the handle portion by removing part of or all of the top wall.

In a preferred alternative the handle portion has a lid portion. Preferably a hinge for the lid portion is formed by the pliable top wall. Preferably the lid portion is at or adjacent the end of the handle that is remote from the implement portion.

Preferably there is a lid at or adjacent the end of the handle remote from the implement portion, said lid opens about a hinge formed by the pliable top wall.

In another aspect the invention broadly resides in a dispensing utensil including

an implement portion; and

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a handle portion, said handle portion includes an substantially rigid elongate body and a pliable top wall, said elongate body has a recess bordered by elongate opposing side walls that are substantially similar in height and have a substantially flat upper surface for fixing a top wall, said elongate body has a substantial shell-like shape or U-shape, said pliable top wall locatable over the elongate body to form a sealed container for storing one or more dispensable items, said handle portion has a lid remote from the implement portion that is openable about a hinge formed by the pliable top wall.

Preferably the lid portion can be closed after opening.

The lid portion may be any suitable shape or design including snap fitting lids and pliable cover lids. In one preferred embodiment the lid portion is resealable. Preferably the lid portion is at the opposite end to the implement portion and has a thumb support to assist with opening and closing of the lid portion. Preferably the lid portion has a surrounding thin area so that with suitable force the lid portion can be opened from the elongate body with the pliable top wall forming a hinge. The lid portion formed on the elongate body preferably has a surrounding weakened area of thin material which breaks when force is applied.

Where there are two or more dispensing items, the recess in the elongate body may be divided with one or more elongate ribs and corresponding lid portions. In a preferred embodiment where there are two dispensing items, there is a substantially centrally located elongate rib forming two separate compartments and two corresponding lid portions providing a dispensing outlet for each item.

Preferably the different dispensing items can be dispensed independently of each other.

In a preferred embodiment, the elongate body is divided by an elongate rib forming two chambers for storing two different dispensing items and two lids for dispensing the contents of the operatively associated chambers.

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The elongate body may have different sized recesses to provide for different amounts of one or more items. Preferably the top wall always forms a flat top surface irrespective of the size of the elongate body. Preferably the overall shape of the elongate body remains the same but enlarges proportionally with increasing amounts of the one or more items.

The utensil preferably has a substantially flat and level surface of the top wall for providing aesthetic appeal and grip comfort irrespective of the size of the utensil.

The use of a separate pliable top wall subsequently sealed to the elongate body after it has been filled with one or more dispensing items provides a substantially tamper proof dispensing utensil. Where there has been tampering of the dispensing utensil, the top wall would no longer be sealed or the lid portion would have been opened.

The dispensing items may be a solid or liquid. The dispensing items preferably include one or more of the following but limited to the following: sugar, coffee, artificial sweetener, powdered chocolate, drink additive, salt, pepper, sauce, herbs, spices and milk.

The implement portion preferably has any suitable shape including a spoon bowl, knife blade, fork prongs or stirring rod. More preferably the implement portion has a spoon bowl shape.

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Preferably the one or more dispensable items stored in the utensil relate to the implement portion. For example in one embodiment where the dispensing utensil has a spoon implement portion, the dispensing item preferably is sugar or another additive that may be used to prepare a drink. Similarly in another embodiment where the dispensing utensil has a knife blade implement portion, the dispensing item preferably is salt or another condiment for use with eating food.

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The implement portion and the handle portion are preferably made integral forming a one piece utensil. More preferably the implement portion and the elongate body are preferably made integral and form a one piece utensil. Alternatively the implement portion and the handle portion are separate parts and are assembled before use. Preferably the handle portion is assembled with a complementary or required implement portion.

BRIEF DESCRIPTION OF THE DRAWINGS

In order that the present invention can be more readily understood and put into practical effect, reference will now be made to the accompanying drawings wherein:

Figure 1 is a plan view of a single chamber dispensing spoon without a top wall;

Figure 2 is a side view of the dispending spoon of Figure 1;

Figure 3 is a bottom view of the dispensing spoon of Figure 1;

Figure 4 is a front view of the dispensing spoon of Figure 1;

Figure 5 is a rear view of the dispensing spoon of Figure 1:

Figure 6 is a plan view of a single chamber dispensing spoon with a top wall;

Figure 7 is a side view of the dispensing spoon of Figure 6;

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Figure 8 is a sectional view (section B-B) of the dispensing spoon of Figure 6;

Figure 9 is a sectional view (section A-A) of the dispensing spoon of Figure 6;

Figure 10 is a top perspective view of a single chamber dispensing spoon without a top wall and a partial cut away lid section;

Figure 11 is a top perspective view of a single chamber dispensing spoon with a top wall;

Figure 12 is a bottom perspective view of a single chamber dispensing spoon as shown in Figure 11;

Figure 13 is a top perspective view of a single chamber dispensing spoon

where the top wall has a window and the lid is open;

Figure 14 is a rear perspective view of the dispensing spoon shown in Figure 13;

Figure 15 is a top perspective view of a single chamber dispensing spoon where the top wall has a window and the lid has been reclosed;

Figure 16 is a bottom perspective view of the dispensing spoon of Figure 15;

Figure 17 is a side view of the dispensing spoon of Figure 15;

Figure 18 is a plan view of another embodiment of a single chamber dispensing spoon with a top wall;

Figure 19 is a longitudinal sectional view of the dispensing spoon of Figure 20 18;

Figure 20 is a bottom view of the dispensing spoon of Figure 18;

Figure 21 is a rear view of the dispensing spoon of Figure 18;

Figure 22 is a front view of the dispensing spoon of Figure 18;

Figure 23 is a top perspective view of the dispensing spoon as shown in Figure 18;

Figure 24 is a bottom perspective view of the dispensing spoon as shown in Figure 18;

Figure 25 is a plan view of a third embodiment of a single chamber dispensing spoon;

Figure 26 is a side view of the dispensing spoon as shown in Figure 25;

Figure 27 is a bottom view of the dispensing spoon as shown in Figure 25;

Figure 28 is a rear view of the dispensing spoon as shown in Figure 25;

Figure 29 is a front view of the dispensing spoon as shown in Figure 25;

Figure 30 is a top perspective view of the dispensing spoon as shown in

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Figure 31 is a bottom perspective view of the dispensing spoon as shown in Figure 25;

Figure 32 is a comparison of the different dispensing spoons wherein (a) is a plan view of a single chamber dispensing spoon corresponding to Figure 6, (b) is a plan view of a single chamber dispensing spoon corresponding to Figure 18, (c) is a plan view of a single chamber dispensing spoon corresponding to Figure 25, and (d) is a plan view of a double chamber dispensing spoon corresponding to Figure 38;

Figure 33 is a plan view of a double chamber dispensing spoon without a top wall;

Figure 34 is a side view of the dispensing spoon as shown in Figure 33;

Figure 35 is a bottom view of the dispensing spoon as shown in Figure 33;

Figure 36 is a rear view of the dispensing spoon as shown in Figure 33;

Figure 37 is a front view of the dispensing spoon as shown in Figure 33;

Figure 38 is a plan view of a double chamber dispensing spoon with a top

25 wall;

Figure 39 is a rear view of the dispensing spoon as shown in Figure 38;

Figure 40 is a perspective view of the double chamber dispensing spoon as shown in Figure 33;

Figure 41 is a perspective view of the double chamber dispensing spoon as shown in Figure 38;

Figure 42 is a bottom perspective view of the double chamber dispensing spoon as shown in Figure 38;

Figure 43 is a top perspective view of the double chamber dispensing spoon as shown in Figure 38 with one lid open; and

10 Figure 44 is a top perspective view of the double chamber dispensing spoon as shown in Figure 38 with both lids open.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

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With reference to Figures 1 to 12, there is shown a single chamber dispensing spoon 10 having a handle 11 integral with a spoon bowl 12 to form a single unit. The handle 11 has opposing side walls 13, 14 which form a substantially U-shaped elongate chamber 15. The side walls 13, 14 are substantially the same height and each have a flat top surface 16, 17 respectively. As the handle 11 forms a U-shaped elongate chamber 15 to hold dispensable items, it is made of substantially rigid plastic material with relatively thin walls. The surrounding walls of tubular shaped handles are comparatively thicker by design than the walls of the handle 11.

A pliable top wall 19 is fixable to the flat top surface 16, 17 surrounding the elongate chamber 15. The pliable top wall 19 may be heat sealed or induction sealed where the top wall is film or foil respectively. In the present embodiment the pliable top wall 19 is made of foil. The pliable top wall 19 is fixed to the flat top

surface 16, 17 after the dispensable items have filled the elongate chamber 15. The fixing of the pliable top wall 19 to the flat top surface 16, 17 after the chamber has been filled with dispensable items avoids the problems associated with the end filling of dispensable items in preformed tubular type containers. In this way a dispensing utensil is produced by a three stage process involving the formation of a chamber, filling the chamber with dispensable items and sealing the chamber with a pliable top wall.

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While the pliable top wall 19 may be partly or completely removed to dispense the contents of the chamber 15, there is a lid portion 20 formed as part of an end portion of the handle 11. The lid portion 20 is at the opposite end of the utensil from the spoon bowl 12. The lid portion 20 is surrounded by a thin section 21 which defines the sides of the lid 22 when it is opened. The lid 22 is formed from the lid portion 20 when pressure is applied and the surrounding thin section 21 is torn and the lid 22 is pressed outward.

The lid portion 20 including lid 22 is shaped to allow a thumb to rest against it and open it with applied pressure. The applied pressure tears the thin section 21, causing the lid 22 to open about a hinge formed by the pliable foil top wall 19. The lid portion 20 has support protrusions 23 to provide a grip for the thumb. The lid portion 20 also has a friction-fit protrusion 24 enabling the lid 22 to reclose.

The pliable top wall 19 has a flat and relatively level upper surface 25 to provide an aesthetically pleasing spoon similar to conventional spoons and provide a comfortable grip for the user. The flat and relatively level upper surface 25 of the pliable top wall 19 is maintained irrespective of the length, depth and width dimensions of the chamber 15. Handles with different capacities of holding

dispensable material is shown in Figure 32 where the utensil shown in (a) represents a single serve, (b) represents a double serve and (c) represents a quad serve.

The pliable top wall 19 provides an upper surface 25 on which information, branding, graphics and advertising can be displayed. The information that may be displayed may include dietary information, instructional information, contents information and dispensing information. For example, the top surface 25 may display dispensing information in the form of a ruler indicating where a person may press in order to dispense a particular part serve.

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In another embodiment shown in Figures 13 to 17, the utensil 30 has an upper wall 31 fixed to the elongate body 32 of handle 33. The upper wall 31 has a clear window section 34 through which a person may view the dispensable contents. Other features of the embodiment shown in Figures 13 to 17 are similar to those described above.

A further embodiment is shown in Figures 18 to 24. This embodiment shows a utensil 40 with a larger handle 41 providing a larger chamber 42 to store an increased amount of dispensable items to form a double serve dispensing utensil 40. The dimensions of the double serve dispensing utensil 40 are substantially proportional but larger than the dimensions of the single serve utensil 10 shown in Figures 1 to 12.

Another embodiment of the dispensing utensil is shown in Figures 25 to 31.

The dispensing utensil 50 shown in these Figures is substantially elongate compared to the single and double serve dispensing utensils 10, 40 respectively. The dispensing utensil 50 has a comparatively larger chamber to store a larger amount of dispensing items and forms a quad serve dispensing utensil.

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A further embodiment of the dispensing utensil is shown in Figure 32(d) and Figures 33 to 44. In this embodiment the dispensing utensil 60 has a handle 61 with an internal rib 62 forming two separate chambers 63, 64. The two chambers 63, 64 are able to store different items. The dispensing utensil 60 has two lids 65, 66 operatively associated with chambers 63, 64 respectively. The lids 65, 66 are formed in a similar manner to the single chamber utensil 10 as described above. Each lid 65, 66 may be opened separately so that the contents in the chambers 63, 64 respectively may be dispensed separately and without contamination from the other chamber. In order to achieve separate openings of the lids 65, 66, the pliable top wall 67 has an end split 68 separating each lid 65, 66.

Other embodiments may have additional chambers to accommodate different dispensable items.

Furthermore, other embodiments may have a stirring rod, knife blade or fork prongs instead of a spoon bowl. With the various embodiments the stored dispensable items preferably relate to the particular dispensing utensil. By way of example, a dispensing knife or dispensing fork may have stored salt, pepper or other condiments while a dispensing spoon may contain sugar, coffee, whitener, powdered chocolate or another suitable additive for a drink.

20 <u>ADVANTAGES</u>

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The preferred embodiment of the present invention provides a conventional shaped spoon and dispensable items in a single unit. The preferred embodiment of the present invention provides the advantage that the utensil can be manufactured, filled and assembled relatively more easily and cheaply than tube-shaped dispensing utensils because of the use of a two part pliable top wall and a substantially shell

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shaped elongate body. The use of a pliable top wall with a substantially shell shaped elongate body also provides the advantage that the amount of contents dispensed can be controlled by depressing the top wall thereby limiting the amount of contents dispensed from the lid portion.

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VARIATIONS

It will of course be realised that while the foregoing has been given by way of illustrative example of this invention, all such and other modifications and variations thereto as would be apparent to persons skilled in the art are deemed to fall within the broad scope and ambit of this invention as is herein set forth.

Throughout the description and claims this specification the word "comprise" and variations of that word such as "comprises" and "comprising", are not intended to exclude other additives, components, integers or steps.

CLAIMS

- A dispensing utensil including an implement portion; and
- a handle portion, said handle portion includes an elongate body with a recess formed by opposing side walls that are substantially similar in height, said handle portion also includes a pliable top wall locatable over the elongate body to form a sealed container for storing one or more dispensable items.
- 10 2. A dispensing utensil including an implement portion; and

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a handle portion, said handle portion includes an substantially rigid elongate body and a pliable top wall, said elongate body has a recess bordered by elongate opposing side walls that are substantially similar in height and have a substantially flat upper surface for fixing a top wall, said elongate body has a substantial shell-like shape or U-shape, said pliable top wall locatable over the elongate body to form a sealed container for storing one or more dispensable items.

- A dispensing utensil as claimed in claim 1 or 2 wherein the elongate body is
 made of substantially rigid plastic and the pliable top wall is made of paper, film or foil.
 - 4. A dispensing utensil as claimed in claim 1 or 2 wherein the upper surface of the top wall has suitable information such as instructional or product information, graphics, branding and or advertising.

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5. A dispensing utensil as claimed in claim 1 or 2 wherein the upper surface of the top wall has a substantially clear window section to view the dispensable items.

- 6. A dispensing utensil as claimed in claim 1 or 2 wherein the amount of contents dispensed can be controlled by depressing the pliable top wall thereby blocking and limiting the dispensable contents.
- A dispensing utensil as claimed in claim 1 or 2 wherein there is a lid at or
 adjacent the end of the handle portion remote from the implement portion, said lid opens about a hinge formed by the pliable top wall.
 - A dispensing utensil including an implement portion; and
- a handle portion, said handle portion includes an substantially rigid elongate body and a pliable top wall, said elongate body has a recess bordered by elongate opposing side walls that are substantially similar in height and have a substantially flat upper surface for fixing a top wall, said elongate body has a substantial shell-like shape or U-shape, said pliable top wall locatable over the elongate body to form a sealed container for storing one or more dispensable items, said handle portion has a lid remote from the implement portion that is openable about a hinge formed by the pliable top wall.
 - 9. A dispensing utensil as claimed in claim 7 or 8 wherein the lid is reclosable.

- 10. A dispensing utensil as claimed in claim 7 or 8 wherein the lid is reclosable and has a friction fit protrusion for reclosing purposes.
- 11. A dispensing utensil as claimed in claim 7 or 8 wherein the lid has a thumb5 support to assist with opening and closing of the lid.
 - 12. A dispensing utensil as claimed in claim 7 or 8 wherein the lid portion formed on the elongate body has a surrounding weakened area of thin material which breaks when force is applied.

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13. A dispensing utensil as claimed in claim 7or 8 wherein said elongate body is divided by an elongate rib forming two chambers for storing two different dispensing items and two lids for dispensing the contents of the operatively associated chambers.

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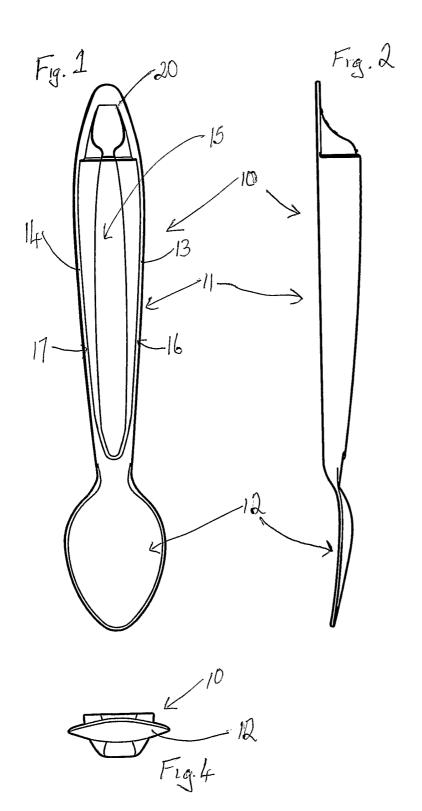
- 14. A dispensing utensil as claimed in any one of the above mentioned claims wherein the utensil has a substantially flat and level surface of the top wall for providing aesthetic appeal and grip comfort irrespective of the size of the utensil.
- 20 15. A dispensing utensil as claimed in any one of the above mentioned claims wherein the dispensing items are selected from one or more of the following items: sugar, coffee, artificial sweetener, powdered chocolate or drink additive, salt, pepper, sauce, herbs, spices, suitable condiments and milk.

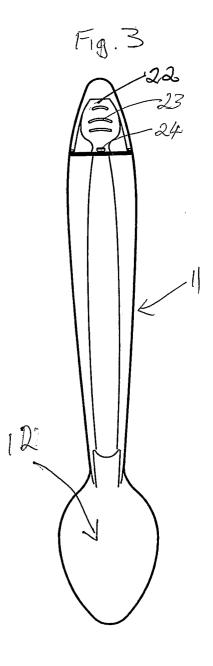
- 16. A dispensing utensil as claimed in any one of the above mentioned claims wherein the implement portion preferably has any suitable shape including a spoon bowl, knife blade, fork prongs or stirring rod.
- 5 17. A dispensing utensil as claimed in any one of the above mentioned claims wherein the one or more dispensable items stored in the utensil functionally complement the implement portion.
- 18. A dispensing utensil as claimed in any one of the above mentioned claims10 wherein the implement portion and the handle portion are made integral forming a one piece utensil
 - 19. A dispensing utensil as claimed in any one of the claims 1 to 17 wherein the implement portion and the handle portion are separate parts and are assembled before use.

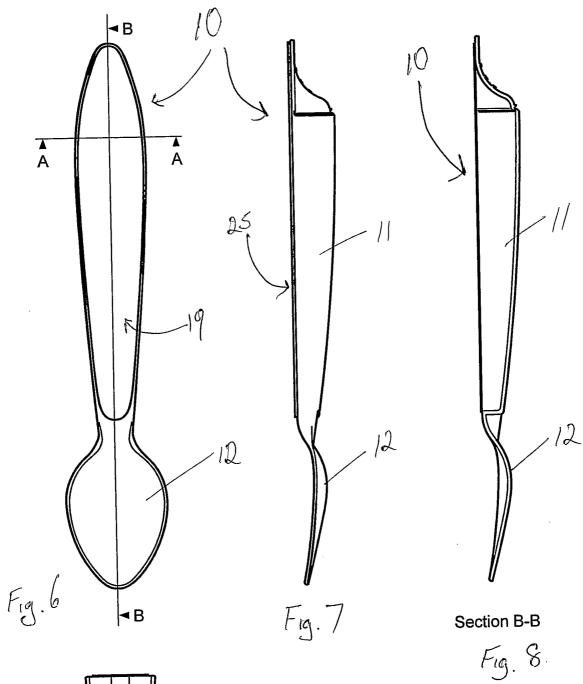
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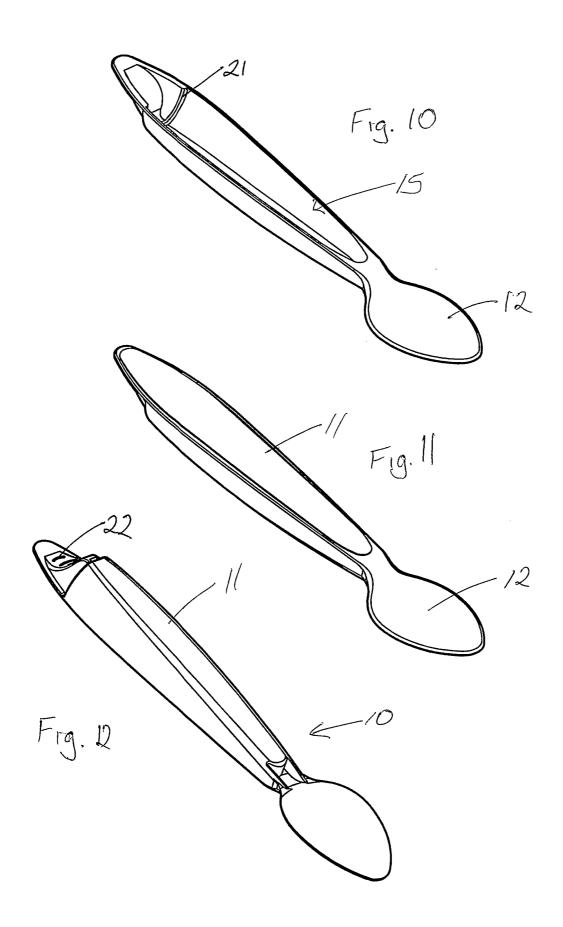




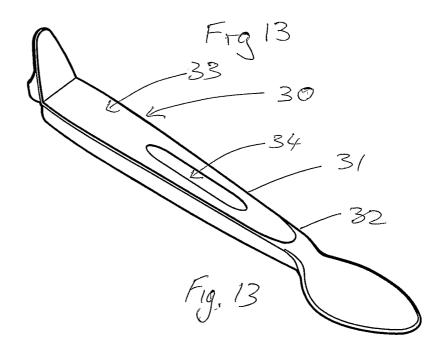


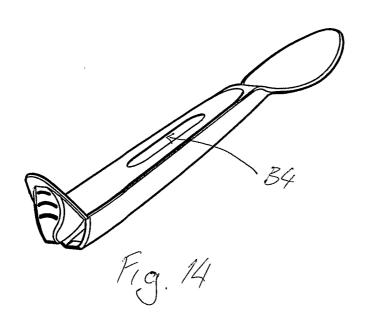
Section A-A

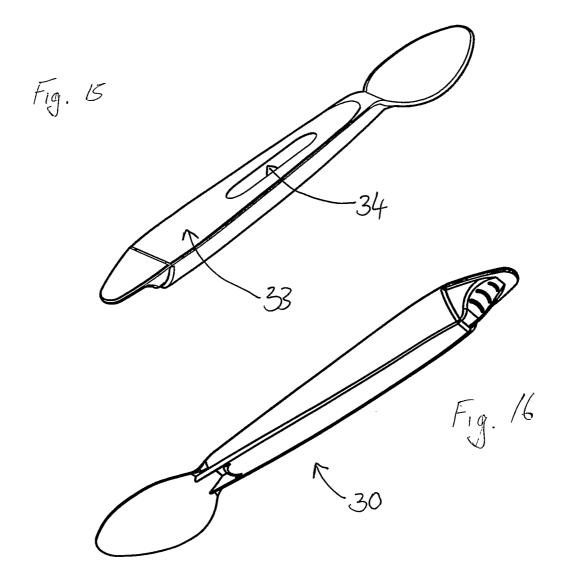
Fig. 9

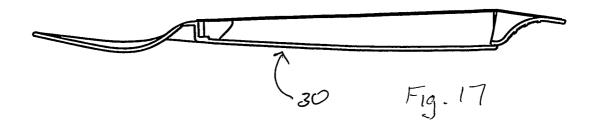


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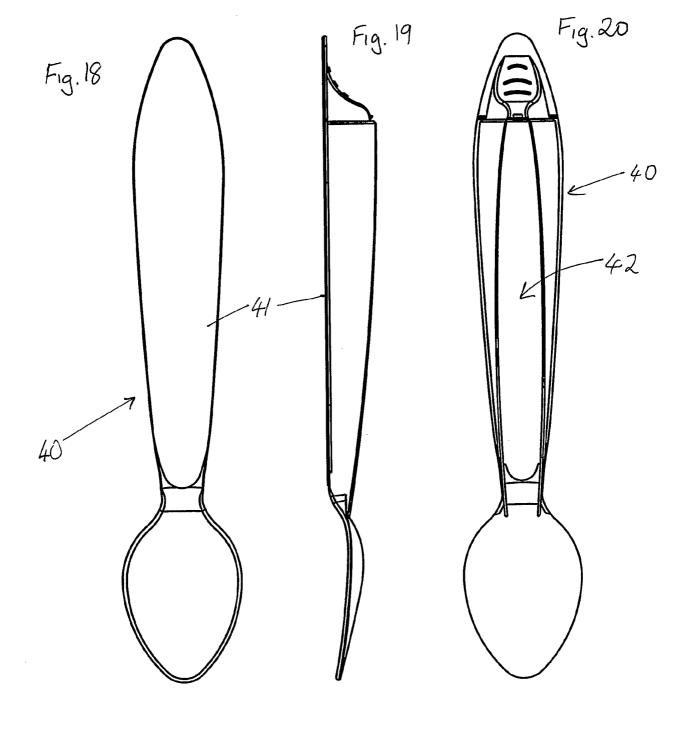
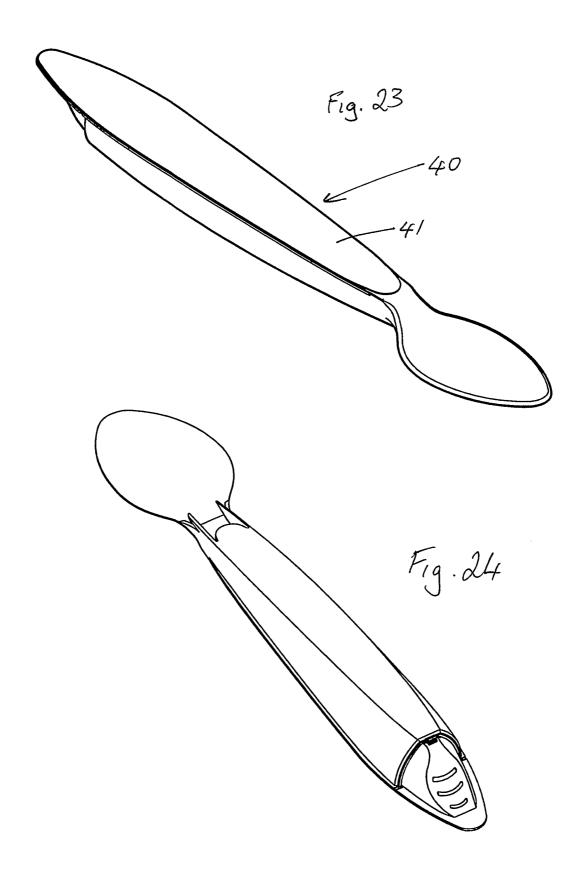
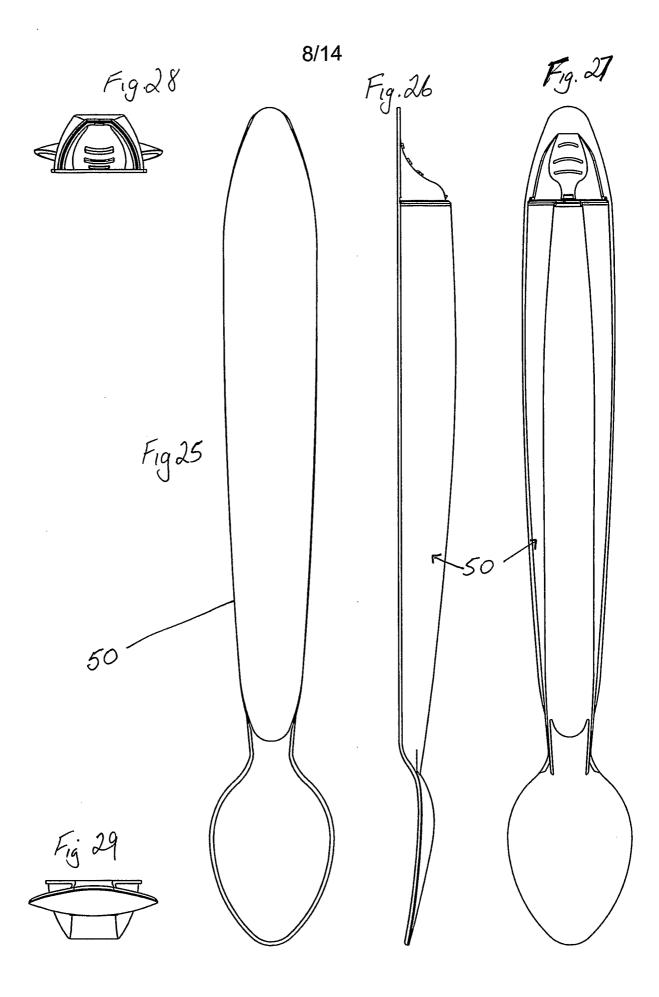


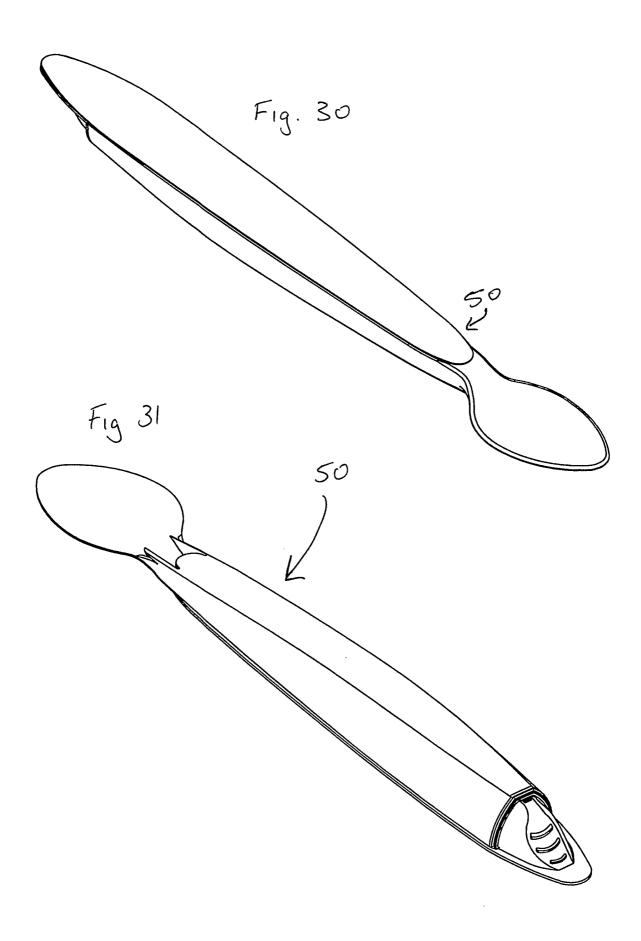


Fig 22

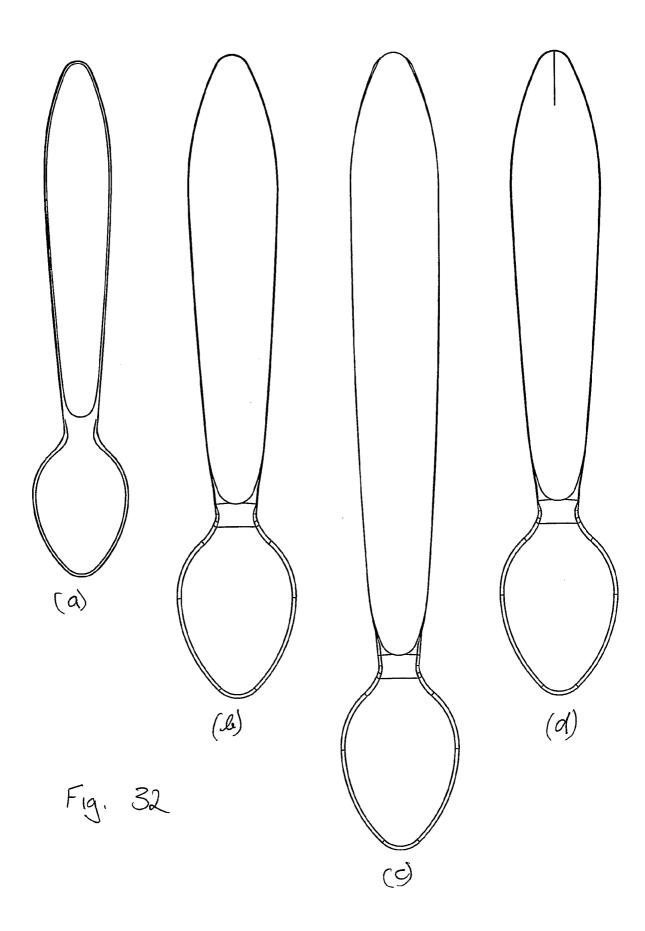
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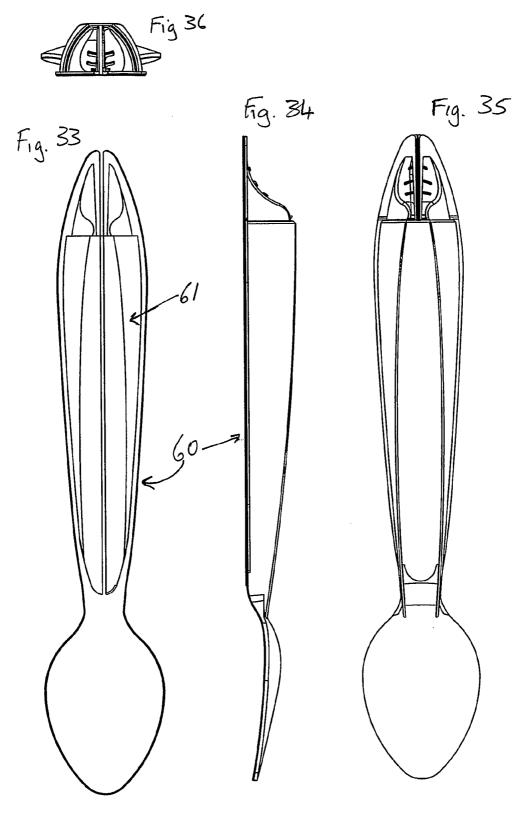
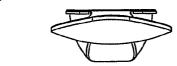
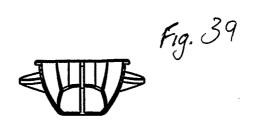
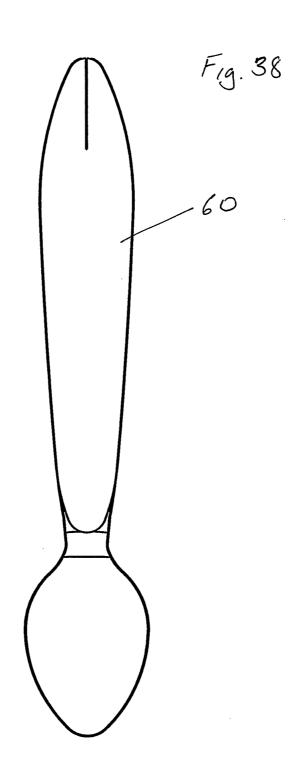


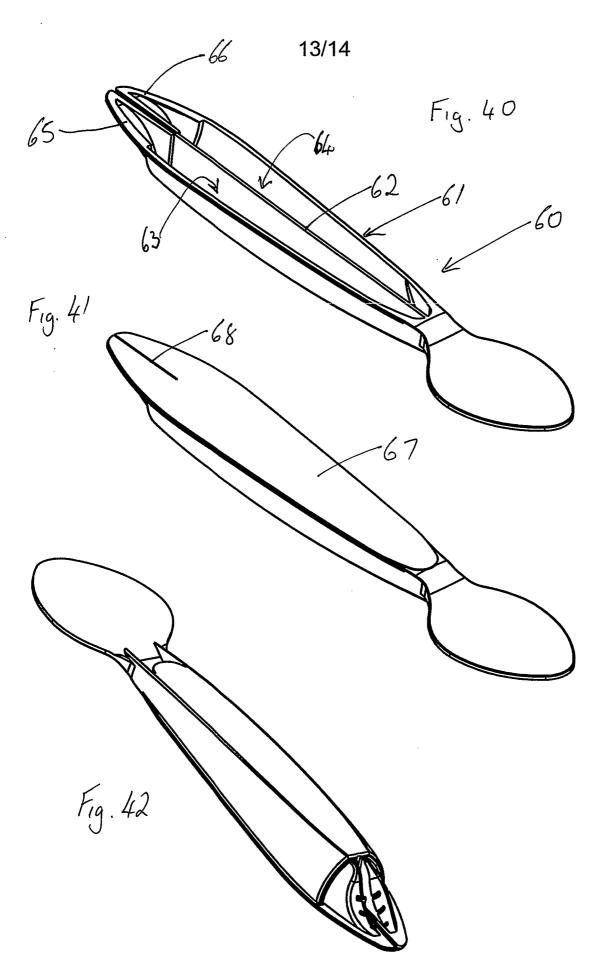
Fig. 37



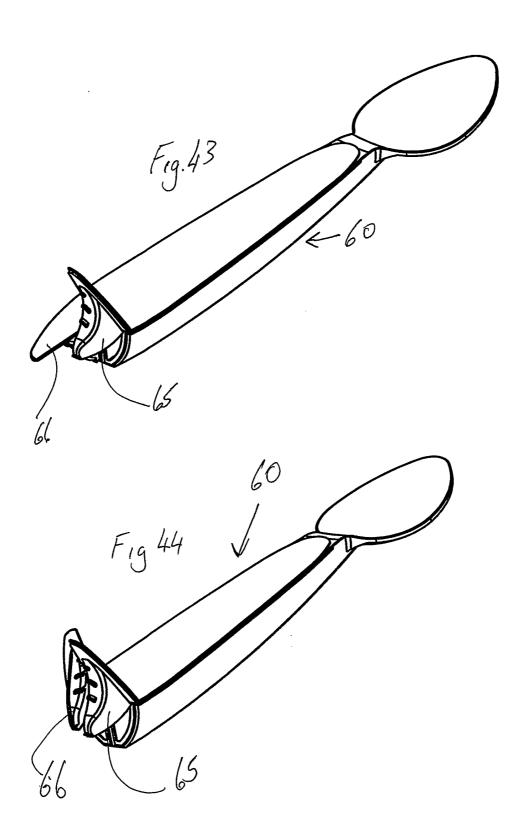
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INTERNATIONAL SEARCH REPORT

International application No.

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			101/1102004/	001010				
Α.	CLASSIFICATION OF SUBJECT MATTER							
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According to I	According to International Patent Classification (IPC) or to both national classification and IPC							
В.	FIELDS SEARCHED							
Minimum documentation searched (classification system followed by classification symbols)								
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) WPAT, A47G 21/02, 21/04, 19/30 A47J 43/28 B65D 83/06, 85/72, key words SPON+,FORK+,UTENSIL+, KNI+,STIR+,HANDLE+, SHANK+, BODY+, STOR+, HOLD+, DISPENS+								
C. DOCUMENTS CONSIDERED TO BE RELEVANT								
Category*	Citation of document, with indication, where	Relevant to claim No.						
P,A	GB 2401025 A(RACHELE) 3 November Whole document	1-19						
A	US 4888188 A (CASTNER, Sr. et al.) 19 December 1989 Whole document							
A	AU 63787/98 A (MACNAGHTEN) 5 N Whole document	1-19						
A	FR 2622424 A (RAMBIN) 5 May 1989 Whole document							
Further documents are listed in the continuation of Box C X See patent family annex				×				
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "IT" later document published after the international filing date or priority date and conflict with the application but cited to understand the principle or theory underlying the invention								
-	oplication or patent but published on or after the "X" on al filing date	document of particular relevance; or cannot be considered to involve	cument of particular relevance; the claimed invention cannot be considered novel cannot be considered to involve an inventive step when the document is taken					
"L" document which may throw doubts on priority claim(s) "Y" doc or which is cited to establish the publication date of inv		involve an inventive step when the	cument of particular relevance; the claimed invention cannot be considered to volve an inventive step when the document is combined with one or more other ch documents, such combination being obvious to a person skilled in the art					
"O" document referring to an oral disclosure, use, exhibition or other means "&" doc			cument member of the same patent family					
"P" document published prior to the international filing date but later than the priority date claimed								
	al completion of the international search	Date of mailing of the inte	Date of mailing of the international search report 2 4 FEB 2005					
18 February 2	ng address of the ISA/AU	Authorized officer						
AUSTRALIAN	PATENT OFFICE	·						
	VODEN ACT 2606, AUSTRALIA pct@ipaustralia.gov.au	SARAVANAMÚTH	SARAVANAMÚTHU PONNAMPALAM					
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2004/001818

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

	t Document Cited in Search Report	Patent Family Member		
GB	2401025	NONE		
US	4888188	NONE		
AU	63787/98	NONE		
FR	2622424	NONE		

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX