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(11) **EP 1 116 668 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:  
**18.07.2001 Bulletin 2001/29**

(51) Int Cl.7: **B65D 77/04**

(21) Application number: **00100192.4**

(22) Date of filing: **13.01.2000**

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE**  
Designated Extension States:  
**AL LT LV MK RO SI**

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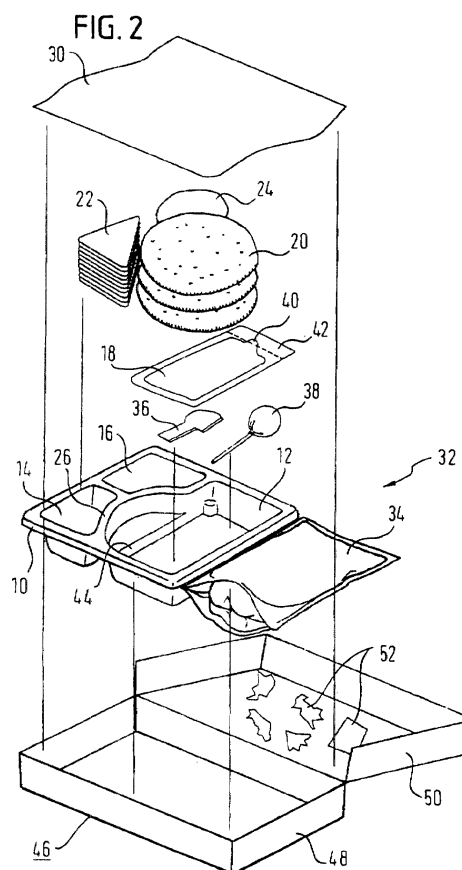
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(54) **A food package including a tray and a sleeve surrounding said tray**

(57) A food package (32) comprises a box (46), which contains a tray (10) comprising separate, individually sealed compartments (12, 14, 16), in which food items such as pizza crusts (20), pizza toppings (22, 24), a sauce (18) and the like are accommodated, and is characterized in that a drink (34) is contained in the box (46) separate from the tray (10).



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## Description

### Technical Field

[0001] The present invention generally relates to a food package, and in particular to a food package comprising a box which contains a tray in which separate, individually sealed compartments are formed.

### Prior Art

[0002] In the field of consumer food products it is generally known to provide ready-to-eat food kits, of which the components are accommodated in individual compartments of a tray. Such a tray is for example known from EP 0 776 605 A2 and comprises in this case three compartments in which different food items are accommodated which can be put together such that a complete pizza is formed. For example, in one of the compartments a pouch containing pizza sauce is arranged at the bottom of the compartment, and several pizza crusts are disposed on top of the sauce pouch. Furthermore, two smaller, separate compartments are formed, one of which contains cheese and the other one of which accommodates another pizza topping, for example meat. The tray is covered with a film such that the film is bonded with an outer rim and several inner flanges or ridges delimiting the compartments against each other. As a result, each of the compartments is individually sealed, and flavor, moisture and microbiological migration between the food items contained in the individual compartments are prevented.

[0003] In US 5,123,527 it is proposed to enclose a tray similar to the one according to the above-mentioned EP 0 776 605 A2 by a sleeve which can for example be made of carton. A similar package is known from US 5,091,199, in which a method of producing a package is disclosed, in which a tray is partially enclosed by a carton, and the carton can extend between the compartments.

[0004] A food package according to the preamble of claim 1 is known from US 4,159,771 and is composed of a tray which comprises separate and individually sealed compartments which is accommodated in an outer box.

### Summary of the Invention

[0005] It is an object underlying the invention to provide a food package which contains a complete meal and in which the components of the meal can be accommodated properly and suitably separate from each other.

[0006] This object is solved by means of the food package according to claim 1.

[0007] In accordance with the invention, a novel food package is provided which on the one hand comprises various food items which can be combined so as to form

a meal, for example, a ready-to-eat pizza. These food items can properly be accommodated in separate and individually sealed compartments of a tray so that the different items exhibiting individual properties such as moisture content, etc. can be properly stored. According to the invention, the meal kit contained in the tray on the other hand comprises a drink, so that a novel, in every respect complete meal is provided. In other words, the consumer can be provided with a single food package allowing him to enjoy a complete meal, for example, consisting of one or more pizzas, a drink and possibly a so-called treat such as candy, a lollipop or a confectionery product.

[0008] According to the invention, the complete meal consisting of various food items contained in the tray and the separate drink is accommodated in a box. This box completely encloses the tray and the drink, so that all of the surfaces of the box can advantageously be used to display commercial and entertainment information. As a result, the invention provides a package which is not only advantageous for the consumer, because a complete meal is contained in a single package. Rather, the manufacturer of the complete meal can also enjoy the advantages of an outer box which is, as mentioned above, useful for printing any type of information including advertisements, games and the like thereon. This aspect in turn adds to the advantages for the consumer, because he can enjoy the games and information which can be printed on the outer box. Furthermore, as mentioned above, not only a complete meal can be contained in the inventive package, but the meal can in an enjoyable way be combined with a treat and even games which can also be contained in the inventive package. Altogether, the invention provides a novel food package which leads to advantages for both the manufacturer and the consumer.

[0009] The food items which are contained in the tray of the inventive food package include, but are not limited to the following: baked pizza crust or crusts, pizza sauce, for example in a pouch and various pizza toppings, for example salami, pepperoni, ham and different types of cheeses. Furthermore, a so-called treat, such as candy, a lollipop or a confectionery product can be stored in the tray. The tray is hermetically sealed with a top film such that the individual compartments are sealed from each other. In this way, flavor, moisture and microbiological migration between the different food items is prevented. In particular, it should be noted that the tray according to EP 0 776 605 A2 can be used as the tray of the food package according to the present invention. Consequently, the disclosure of this document with regard to the tray and its contents is fully incorporated herein by means of reference. In other words, it may be referred to the mentioned documents with regard to details of the tray forming a part of the food package according to the present invention. Finally, it should be noted that the meal kit according to the present invention is prepared such that it can be stored

refrigerated and not frozen, similar to the meal kit according to EP 0 776 605 A2.

**[0010]** Preferred embodiments of the invention are described in the dependent claims.

**[0011]** While the box enclosing the tray and the separate drink can be made of any suitable material, it is preferred that this box is made of carton. In this manner, a recyclable and easy-to-print-on material is used for the outer box. The box is preferably a foldable box which is folded such that it encloses the tray and the drink. At the same time, the box can easily be formed so as to be easy to open.

**[0012]** In particular, according to preferred embodiments of the invention, the box can be top or side opened. In particular, perforations or cuttings can be provided in order to allow easy opening of the box by breaking the perforations or cuttings.

**[0013]** Preferably the box is designed such that it is usable as a plate after opening and while consuming the ready-to-eat meal. In this way, the food package according to the invention provides further advantages for the consumer over known food packages.

**[0014]** Further advantages can be obtained if the box comprises one or more cut-outs which are preferably formed on a top surface. In this manner, the surface, which the consumer is faced with when he views the food package, is formed such that the consumer is allowed to view all of the components of the food package. Furthermore, the cut-outs can be formed such that they provide an aesthetic outer appearance of the food package and enhance its visual appeal.

**[0015]** With regard to the type of package of the drink, which is contained in the food package according to the invention, it is conceived to provide the drink in a pouch, a can or a carton. All of these packages allow the drink to be stored properly and in a way ensuring freshness and preventing leakage. Preferably the drink packaged in the manner described above further comprises a straw, so that it can be consumed without spilling.

**[0016]** With regard to the tray, it has proven advantageous to form the tray from a semi-transparent material such that the tray exhibits barrier properties protecting the food items contained therein against light and oxygen permeation.

**[0017]** Furthermore, it is preferred to form the walls of the tray compartments such that they are slanted inwards. This allows the food and the other items contained therein to be gripped easily so that altogether the preparation of the meal from the meal kit contained in the tray is facilitated.

**[0018]** As was already mentioned above, it is also preferred to additionally place a treat, such as candy, a lollipop or a confectionery product in the tray in order to add a type of a dessert to the meal. Furthermore, it leads to advantages with regard to the preparation of a complete pizza from the ready-to-eat pizza kit if the tray also accommodates a spreader or a similar utensil which is adapted to be used to spread the pizza sauce on the

pizza crust.

**[0019]** Finally, the tray of the inventive food package preferably comprises indents which are formed and arranged in a way to help carry the tray along the production and filling line during preparation of the tray.

### Brief Description of the Drawings

**[0020]** Further advantages and characteristics of the invention will be apparent from the following description of a preferred embodiment thereof taken in connection with the accompanying drawings, in which:

Fig. 1 is a perspective view of the tray of the inventive food package with the top film removed; and

Fig. 2 is an exploded perspective view of the food package according to the invention.

### Detailed Description of a Preferred Embodiment of the Invention

**[0021]** As shown in Fig. 1, the tray 10 of the inventive food package is in the depicted embodiment formed with one comparably large compartment 12 and two smaller compartments 14 and 16. As is additionally apparent from Fig. 2, the larger compartment 12 accommodates various items such as a spreader and a lollipop, further described below, as well as a pouch 18 containing pizza sauce and one or more, in the embodiment shown three, pizza crusts 20. The compartment 12 is suitably formed such that the mentioned items can be accommodated therein. With regard to the pizza crust or crusts 20, it should be noted that these can be circular in shape as shown in Fig. 1 but they can also have a triangular, square, wedge or any other desired shape.

**[0022]** Furthermore, the depicted embodiment of the tray 10 contains several slices of triangular shaped cheese 22. Naturally, also this cheese can have another shape, for example a square or rectangular shape. Alternatively, the cheese can be grated. Examples of the suitable types of cheeses include, but are not limited to Gouda, Chester, Cheddar, Mozzarella, or Swiss or other similar cheeses. Finally, the other one of the two smaller compartments 16 of the shown embodiment accommodates slices of pepperoni 24. As will be apparent, the food package of the invention can also include a tray 10 containing salami, ham or any other similar pizza topping instead of the pepperoni 24 which is shown by way of example only. Furthermore, the invention is not limited to the shown arrangement of the cheese and the pepperoni. Rather, these items can be arranged such that they are exchanged for each other.

**[0023]** As can be seen in Fig. 1, the individual compartments 12, 14, 16 are delimited against each other by internal flanges or ridges 26 which are at approximately the same level as the outer rim 28 of the tray 10.

Preferably the flanges or ridges 26 are at exactly the same level as the outer rim 28. In this manner, when the tray 10 is closed by a top film 30 (see Fig. 2), all of the compartments are individually sealed, so that migration of moisture or flavor between the individual compartments is effectively prevented.

[0024] Fig. 2 additionally shows the structure of the food package 32 according to the invention including the tray of Fig. 1 as well as a separate drink 34. As can be seen from Fig. 2, in the depicted embodiment a spreader 36 facilitating spreading of the sauce contained in the pouch 18 as well as a lollipop 38 are accommodated at the bottom of the larger compartment 12. In the depicted case, the pouch 18 containing the sauce is placed on top of the spreader and the lollipop 38. As can be taken from Fig. 2, the pouch of the depicted embodiment comprises a spout 40 which facilitates pouring of the sauce as well as a perforated strip 42 allowing easy opening of the pouch 18. Examples of suitable sauces include, but are not limited to tomato-based, salsa or similar sauces.

[0025] Furthermore, the pizza crusts 20 are placed on top of the pouch 18. In order to prevent deformation of the pizza crusts 20, the compartment 12 is formed with a step 44 delimiting a first, rectangular shaped portion of the compartment 12 and a second, approximately semi-circular shaped portion located at a higher level. The lowermost pizza crust 20 rests on this step and on the top surface of the sauce pouch 18. As mentioned above, pieces of cheese 22 and slices of pepperoni 24 are accommodated in the smaller compartments 14, 16 respectively.

[0026] The tray 10 containing the above-mentioned food items is covered and sealed with the top film 30. This film 30 can for example be sealed to the tray by heat sealing. The ridges or flanges 26 cooperate with the top film 30 in order to hermetically seal the compartments 12, 14, 16 from each other. It should be noted that the top film 30 is preferably made of transparent, flexible film or sheet material, which can be printed upon if desired.

[0027] According to the invention, the tray 10 constituted as outlined above, is placed in a separate carton or a foldable box 46 together with the drink 34. In the embodiment shown in the drawing, the drink is contained in a pouch. However, it is apparent that the drink could alternatively be contained in a can, a carton or any other suitable package.

[0028] Particularly when the drink is contained in a carton or a pouch, a straw can be provided together with the drink in order to facilitate consumption thereof. However, a straw may also be added to the inventive food package, when the drink is contained in a can.

[0029] The outer box 46 comprises a base portion 48 and a lid 50 which are hingedly linked to each other and can advantageously be integrally formed from a single carton blank. In the embodiment shown in the drawing, the lid 50 comprises several cut-outs 52 provided on the

top surface thereof. This advantageously allows the consumer to view part of or all of the components contained in the food package. Naturally, the cut-outs can be covered with a transparent or semi-transparent film. In particular, these cut-outs can be incorporated into the overall design of the outer box 46 so that an enhanced visual appearance can be achieved. As shown, the outer box 46 is top opened. However, it can alternatively be side opened. Either way, the opening of the outer box 46 can easily be carried out by breaking perforations or cuttings.

[0030] The food package 32 according to the invention is assembled as follows. Firstly, the pizza kit comprising the pizza crusts 20, the sauce pouch 18, the slices of cheese 22 as well as the slices of pepperoni 24 are placed in the tray 10 along with the spreader 36 and the candy 38. Afterwards, the top film 30 is sealed to the tray 10. Then the tray 10 and the drink 34 are placed in the box 46. The box 46 is closed and finally the resulting food package 32 is preferably stored at refrigerated temperatures.

[0031] When it is intended to consume the complete meal contained in the inventive food package 32, the outer box 46 is opened, and the drink 34 as well as the tray 10 are removed. The tray 10 is then opened, the pizza crusts 20 are removed, and the pizza is assembled using the components in any suitable order. Typically, the sauce contained in the sauce pouch 18 will be spread on the pizza crust 20 using the spreader 36, the non-cheese topping, for example the slices of pepperoni 24 are placed on the sauce and the slices of cheese 22 are placed on the pepperoni. The assembled pizza is then ready to eat, and as soon as the drink 34 is opened, a complete meal can be enjoyed by the consumer.

## Claims

1. Food package (32) comprising a box (46), which contains a tray (10) comprising separate, individually sealed compartments (12, 14, 16), in which food items such as pizza crusts (20), pizza toppings (22, 24), a sauce (18) and the like are accommodated, **characterized** in that a drink (34) is contained in the box (46) separate from the tray (10).
2. Food package according to claim 1, **characterized** in that the box (46) is made of carton.
3. Food package according to claim 1 or 2, **characterized** in that the box (46) can be top or side opened.
4. Food package according to any of the preceding claims, **characterized** in that the box (46) is after opening usable as a plate.

5. Food package according to any of the preceding claims,  
**characterized** in that the box (46) comprises one or more cut-outs (52), which are preferably formed on the top surface thereof. 5
6. Food package according to any of the preceding claims,  
**characterized** in that the drink (34) is packaged in a pouch, a can or a carton, preferably with a straw. 10
7. Food package according to any of the preceding claims,  
**characterized** in that the tray (10) is made of semi-transparent material. 15
8. Food package according to any of the preceding claims,  
**characterized** in that the compartments (12, 14, 16) of the tray (10) comprise walls which are slanted inwards. 20
9. Food package according to any of the preceding claims,  
**characterized** in that the tray (10) additionally accommodates candy and/or a lollipop (38) and/or a confectionery product and/or a spreader (36) for spreading the sauce. 25
10. Food package according to any of the preceding claims,  
**characterized** in that the tray (10) comprises indentations. 30

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FIG. 1

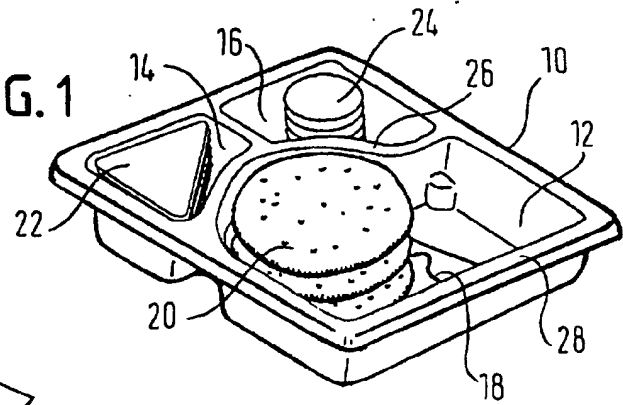
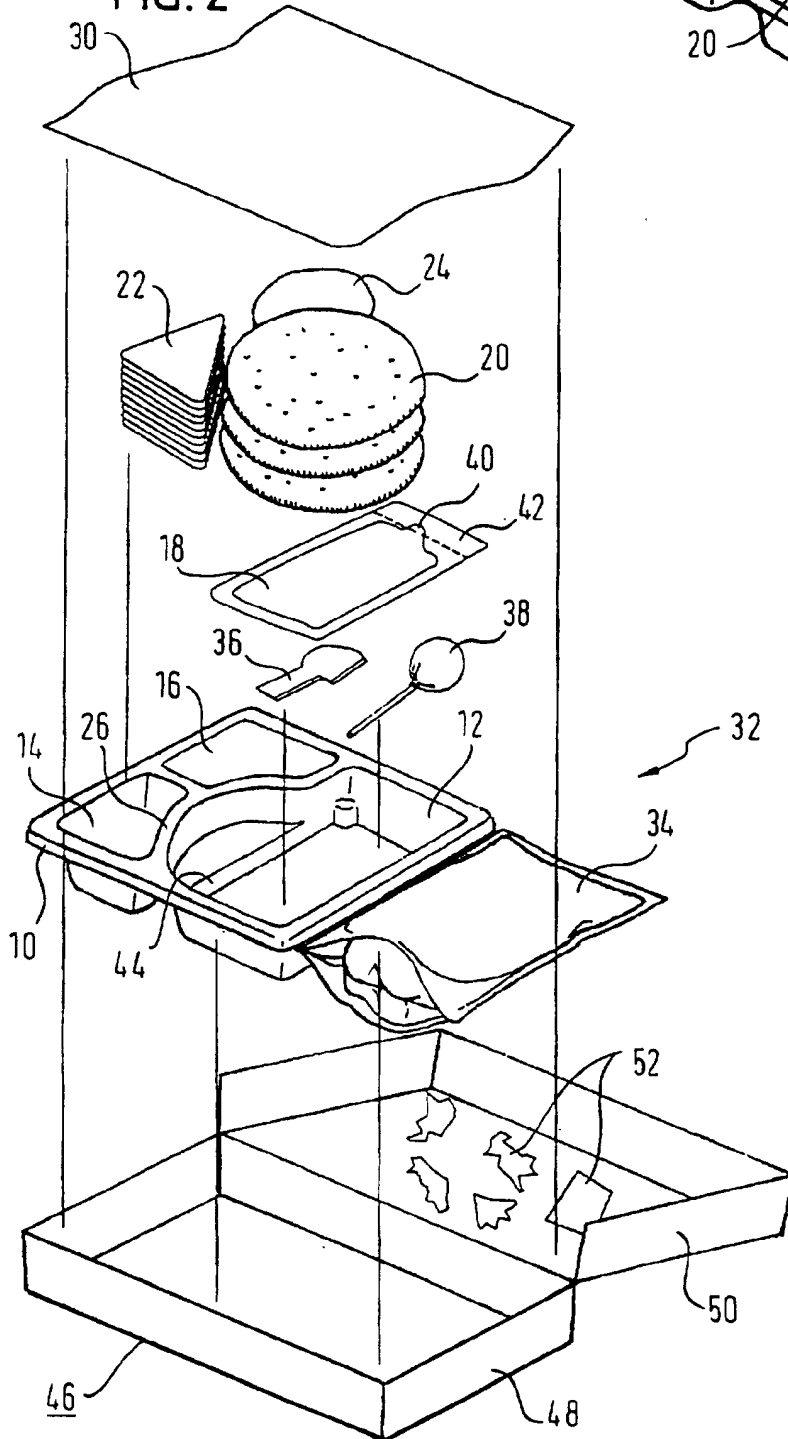


FIG. 2





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# EUROPEAN SEARCH REPORT

Application Number  
EP 00 10 0192

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A,D	US 5 839 574 A (LORENCE MATTHEW W ET AL) 24 November 1998 (1998-11-24) * abstract; claims; figures *	1-3,8-10	B65D77/04
A	GB 2 194 514 A (WADDINGTONS CARTONS LTD) 9 March 1988 (1988-03-09) * column 1, line 35 - line 44; figures *	1-4,9	
A	GB 2 194 515 A (WADDINGTONS CARTONS LTD) 9 March 1988 (1988-03-09) * column 1, line 5 - line 20; claims; figures *	1-4,9	
A	US 4 517 206 A (MURPHY GORDON D ET AL) 14 May 1985 (1985-05-14) * column 2, line 32 - column 3, line 6; figures *		
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B65D
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>15 June 2000</b>	Examiner <b>SERRANO GALARRAGA, J</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

EPO FORM 1503 03/02 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 10 0192

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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15-06-2000

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