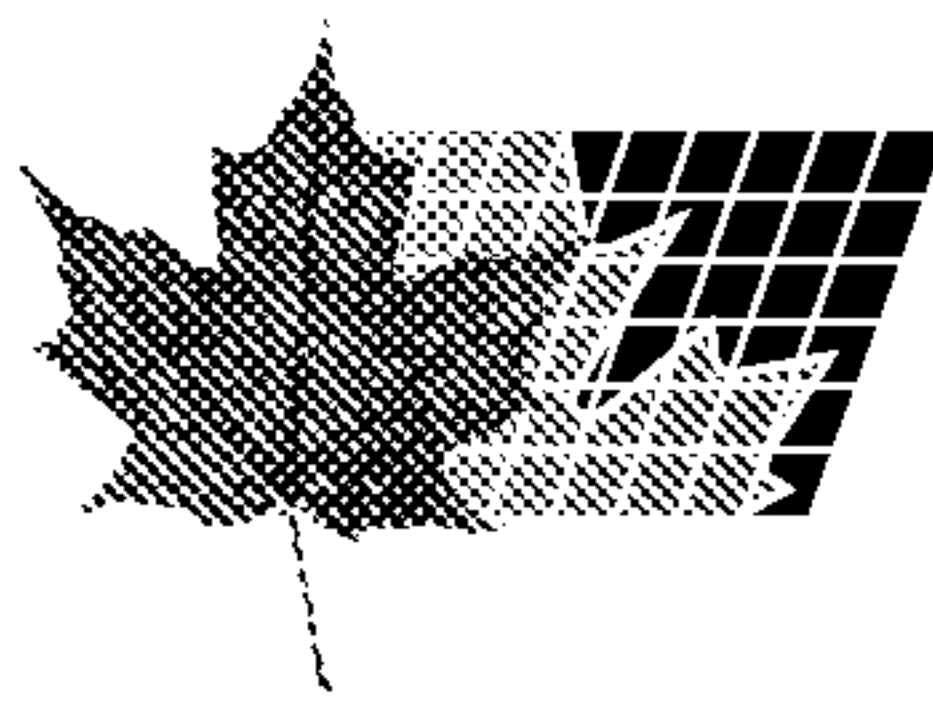




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(51) Int.Cl.⁶ A23G 9/02

(30) 1998/05/08 (98201460.7) EP

(54) **FRIANDISES COMPOSEES A LA CREME GLACEE ET
PROCESSUS DE FABRICATION CONNEXE**

(54) **COMPOSITE ICE CREAM CONFECTIONERY ARTICLE, AND
MANUFACTURING PROCESS**

(57) The composite ice cream confectionery article consists of a cooked pastry and an ice cream filling, in which the thin cooked pastry is able to retain a particularly crunchy texture when stored in frozen form and on consumption, and the thin pastry is a cooked pastry of brick or filo type consisting of a superposition of very thin layers of pastry and of fat applied in liquid form, with or without a layer of sugar.

Abstract

The composite ice cream confectionery article consists of a cooked pastry and an ice cream filling, in which the thin cooked pastry is able to retain a particularly crunchy texture when stored in frozen form and on consumption, and the thin pastry is a cooked pastry of brick or filo type consisting of a superposition of very thin layers of pastry and of fat applied in liquid form, with or without a layer of sugar.

**Composite ice cream confectionery article and
manufacturing process**

The invention relates to a composite ice cream
5 confectionery article comprising a thin cooked pastry
and an ice cream.

As an example, composite ice cream
confectionery articles consisting of an ice cream
combined with a biscuit or a crisp wafer, in particular
10 of the type such as cakes, bars and particularly cones,
cigars or sandwiches made of wafer surrounding an ice
cream or filled with ice cream, must include a system
which makes the biscuit or the wafer impervious to the
moisture coming from the ice cream, in order to prevent
15 it from losing its crisp nature, either during storage
or during consumption.

This is usually carried out by coating either
the surface of the biscuit in contact with the ice
cream, or the ice cream itself, with a fatty
20 composition, for example with chocolate or with a
coating containing chocolate. For example, according to
EP-A-0,023,152, a wafer cone can be lined with a
covering layer of liquid fat having the required
properties of fluidity and of spreadability by
25 spraying, so as to establish a barrier against the
moisture coming from the ice cream filling.

Another process consists, for example, as
described in FR-A-2,574,250, in applying, by roller, a
liquid fatty substance close to its solidification
30 point onto a cooked wafer, before it is shaped.

The aim of the invention is to provide a
composite ice cream confectionery article comprising a
thin cooked pastry and an ice cream filling, in which
the thin cooked pastry is able to retain a particularly
35 crunchy texture when stored in frozen form and on
consumption.

The article according to the invention is
characterized in that the thin cooked pastry consists
of a superposition of very thin layers of pastry of

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brick or filo type, and of fat applied in liquid form, with or without addition of a layer of sugar.

5 The article comprises the combination of ice cream and thin cooked pastry consisting of a superposition of layers of very thin pastry and of fat with or without a layer of sugar. The pastry part of the article has been shaped, cooked and coated with a barrier to moisture, at least on the parts liable to come into contact with the ice cream.

10 The layers of very thin pastry, of from 0.2 to 1 mm in thickness, can be brick pastry or filo pastry, strudel pastry or baklava pastry, these last three names in fact denoting the same type of pastry and differing only in their cultural origin. For
15 simplicity, the term "filo pastry" will be used hereinbelow. Filo pastry is commonly used in pastry products of oriental type, such as, for example, baklavas. An important characteristic of this type of pastry is that it contains no sugar in its composition
20 per se.

The term "ice cream" used here applies to any ice cream confectionery, in particular sorbet, "sherbet" or milk ice, water ice and ice cream which has been aerated to a greater or lesser extent. Such an
25 article can contain inclusions, in particular marbling or bits or thin flakes, syrup, cooked sugar, fruit pulp, marshmallow, gums, dried or preserved fruit or sweet confectionery such as nougat, truffle or chocolate, where appropriate aerated, or flavouring
30 ingredients, for example spices, alcohols or liqueurs.

Various manufacturing processes are used to manufacture the thin pastry, depending on the nature of the thin pastry used. Thus, brick pastry is cooked on a cylinder from a liquid pastry. Filo pastry is kneaded,
35 rolled out and then dried.

In both cases, a continuous strip of pastry can be produced, which can be cut into the desired shape.

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A sequence of one to three operations can be carried out to make the thin pastry, preferably a sequence of the following operations:

- a liquid fat is applied, with or without sugar, preferably by spraying onto the upper surface of the piece, and
- the piece is folded onto itself, and the layers of pastry are superposed, so as to imprison the fat, with or without sugar, between the layers of pastry.

From 2 to 10 layers of pastry, preferably about 6 layers, are thus obtained.

The piece made of thin pastry is then shaped by rolling it up on itself or by rolling it up partially around a mandrel or by stamping in order to give it the desired shape. Depending on the nature of the mandrel, for example cylindrical or circular, oval, rounded and flattened or conical cross section, a cigar, a tray, a pancake or a cone of circular or oval cross section can thus be made. Shaping can thus be carried out by partial rolling-up, for example of pieces in the shape of round pancakes in order to curve them into a "taco" shape. A dish or a tray serving as a container for the ice cream, generally of half-moon shape, can be formed, for example, by stamping.

Once it has been shaped, a layer of liquid sugar can be applied to the outer surface of the piece of pastry, preferably by spraying.

The impregnated piece of pastry is then taken up on a support for maintaining its shape, and it is then cooked on its support at about 160-200°C for about 1-15 min. During this cooking, the pastry is made crunchy and its rigidity is ensured. The piece of pastry can be cooked between two heated elements, for example between a female matrix and a male punch.

After cooling, for example to room temperature or to a lower temperature, a moisture-barrier film, for example a fatty composition such as a liquid chocolate

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or a "compound", is sprayed onto the part liable to come into contact with the ice cream filling.

The thin cooked pastry is then filled with the ice cream. As a variant, the ice cream filling can be coated with an above barrier film and introduced into the thin cooked pastry.

The thin cooked pastry can also be used as a component of a product such as ice cream sweets, chocolates, bars or cakes in combination with or coated with a coating of chocolate or of "compound".

The ice cream confectionery article thus produced differs from the known products by the type of pastry, brick pastry or filo pastry, as a superposition of very thin layers, which has never been used previously in combination with ice cream. This combination gives it particularly long-lasting crunchiness since the pastry confectionery article is particularly resistant to the uptake of moisture over time on account of its constitution. The article also has a complex flavour, giving novel organoleptic sensations associated with the combination of the specific cooked pastry and the ice cream.

The examples below illustrate the invention. In these examples, the parts and percentages are given on a weight basis, except where otherwise indicated.

Example 1

A filo pastry is manufactured from a dough whose composition is as follows:

Ingredient	%
Wheat flour (extra strong, gluten-rich)	67.8
Water	27.4
Oil	2.7
Salt	1.4
Gluten	0.7

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Eggs can be added to this formulation. A flavouring such as a cocoa powder can also be added thereto.

The ingredients are mixed together in a mixer (Kemper) at slow speed for 1 min., and then at rapid speed for 4 min., until a smooth, elastic, cohesive pastry is obtained. The pastry is then transferred into an extruder (Rademaker BV) which puts the pastry in the form of a thin layer, and it is rolled out and dried in an infrared dryer. The pastry is then superposed in 6 layers with a spraying of oil, or of butter with or without a sugar solution between each layer, and then pieces with a final thickness of 0.3 mm and of desirable shape are cut out in order to produce a cone-shaped cornet after rolling-up.

The pastry is then rolled up around a conical-shaped mandrel with successive covering of the layers. After spraying a concentrated sugar solution on its outer surface, the product is taken up on a conical support and cooked at 200°C for about 5 min. After cooling for 2 min., the cornet is removed from the mould, sprayed with liquid chocolate so as to coat its inner surface, and is filled with vanilla ice cream, the filling finishing with a decoration in the shape of a flame.

The cooked pastry has a beautiful golden colour and all of its organoleptic qualities remain intact after storing in frozen form for several months, and in particular its crunchiness.

Example 2

A brick pastry is produced using a liquid dough whose composition is as follows:

Ingredient	%
Wheat flour	35.3
Water	59.6
Oil	3.1
Salt	1
Lecithin	1

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The ingredients are dispersed in a turbo-mixer. The liquid dough is then cooked on cylinders, in a pancake oven (SEP EGMO, Groupe Bastide) at 200°C on the first roller and 170°C on the second roller, the pastry being measured out on the first roller so as to form round pancakes.

The pancakes are sprinkled with a liquid fatty substance with or without sugar syrup, and are folded in two. The pieces of pastry are refolded or rolled up in successive layers around a conical mandrel. A thin pastry comprising 4 to 6 layers, of from 0.2 to 1 mm in thickness, is thus obtained. After cooking the shaped pastry at 200°C for 5 min., a nicely golden cornet is obtained. The cooked cornet is then cooled for 2 min. and is removed from the mould. It is sprayed with liquid chocolate so as to coat its inner surface, and is filled with ice cream.

The thin cooked pastry has a beautiful golden colour and all of its organoleptic qualities remain intact after storage in frozen form for several months, and in particular its crunchiness.

Example 3

The process is performed as in Example 2, except that, in order to produce a pastry cornet, the thin pastry is cooked at 200°C for 60 sec. in a mould between two male and female parts.

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Claims

1. Composite ice cream confectionery article comprising a thin cooked pastry and an ice cream,
5 characterized in that the thin cooked pastry consists of a superposition of very thin layers of pastry of brick or filo type, and of fat applied in liquid form, with or without addition of a layer of sugar.
2. Article according to Claim 1, characterized in
10 that the pastry has a thickness of from 0.2 to 1 mm and comprises 2 to 10 layers.
3. Article according to Claim 1, characterized in that the pastry part of the article has been shaped, cooked and coated with a barrier to moisture, at least
15 on the parts liable to come into contact with the ice cream.
4. Article according to Claim 1, characterized in that it is in the form of an ice cream cornet formed by rolling up the thin pastry on a cone-shaped mandrel.
- 20 5. Article according to Claim 1, characterized in that it is in the shape of a cigar, a taco, a dish, a pancake or a tray serving as a container for the ice cream, generally of half-moon shape.
6. Process for manufacturing an article according
25 to one of Claims 1 to 5, characterized in that:
a piece of pastry of desired shape is produced,
the layers of the piece of pastry are superposed by a succession of from 1 to 3, preferably by a sequence, of the following operations:
30 - a liquid fat is applied, with or without sugar, preferably by spraying onto the upper surface of the piece, and
- the piece is folded onto itself so as to imprison the fat, with or without sugar, between the layers
35 of pastry,
the piece of thin pastry is then shaped by rolling it up on itself or by rolling it up partially around a mandrel or by stamping in order to give it the desired shape,

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a layer of liquid sugar is applied to the outer surface of the piece of shaped pastry, the impregnated piece of pastry is then taken up on a support for maintaining its shape, and

5 it is cooked on its support at about 160-200°C for about 1-15 min.

7. Process according to Claim 6, characterized in that after cooking, the piece of shaped and cooked pastry is cooled, and a moisture-barrier film, in
10 particular a fatty composition such as a liquid chocolate or a "compound", is sprayed onto the part liable to come into contact with the ice cream filling.

8. Process according to Claim 6, characterized in that the thin cooked pastry is filled with ice cream.