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(54) Title: EDIBLE SHORTCRUST PASTRY CUP WITH INNER COATING AND METHOD OF MANUFACTURING SAID CUP

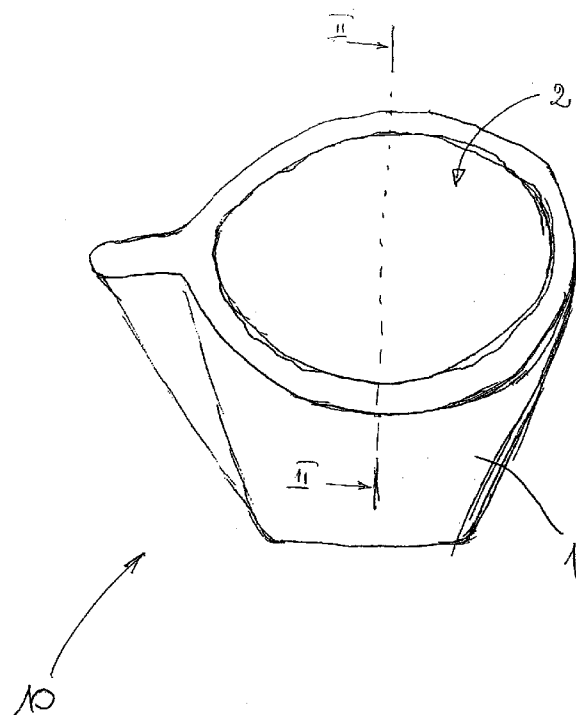


FIG. 1

(57) Abstract: The application describes an edible cup comprising a cup-shaped main body 1 made of shortcrust pastry, and an inner coating 2, constituted of an insoluble icing, and a method of making the cup. The method for making the edible cup comprises at least the following steps; preparing a shortcrust pastry dough; immediately creating agglomerates using the shortcrust pastry dough; cold forming the agglomerates in cup-shaped moulds; double cooking, of the inside and the outside of the cup; covering the inside of the cup with an insoluble icing; and heating the icing.

EDIBLE SHORTCRUST PASTRY CUP WITH INNER COATING AND METHOD OF MANUFACTURING SAID CUP

Technical field

The invention relates to an edible cup and the related method for making it.

- 5 It is known that, especially in Latin countries, the “coffee break” is very famous: whether this custom takes place at the bar or in private, as a result it is necessary to use large quantities of containers suitable for containing said beverage.

Background art

- 10 Therefore, in bars and in coffee shops, there is the issue of having to wash, sterilise and dry a large of cups and small cups made of glass, earthenware or pottery, with the consequent use of large amounts of dish washing detergents, water and electricity and the need to have available expensive machines or to assign staff this task.
- 15 Moreover, the spread of take away refreshments has also increased the use of cups made of plastic or other synthetic materials, all “disposable” and therefore destined to increase the production of waste that is potentially harmful for the environment.

- Also, it should not be overlooked that coffee drinkers often like to have a snack
- 20 with their drink, preferably something sweet, to the extent that in many bars and cafes a coffee is served together with a sweet or a small biscuit.

- In the pastry making sector, the use of shortcrust pastry is very widespread. The traditional recipe for obtaining this product involves first making a “sand-like” mixture made up of blended flour and butter still cold from the refrigerator, with
- 25 the addition of a pinch of salt. For 1 kilogram of shortcrust pastry, it is recommended that approximately 500 grams of flour and 250 grams of butter are used. The mixture is placed on a worktop, then covered with approximately 200 grams of icing sugar and, once formed into the typical crater shape, the yolks of four eggs and the grated zest of one lemon are added. All of this is combined to
- 30 create a block that is wrapped in transparent film and placed in the refrigerator for

at least 30 minutes. Then, the block is worked and rolled out to the appropriate thickness for the desired preparation.

Disclosure of the invention

- 5 This invention, as characterised in the claims, relates to an edible cup and to the method for making it.

The main advantage of this invention is the fact that it allows the use of edible coffee cups, suitable as an environmentally-friendly alternative to the traditional cups which have to be washed and the “disposable” types, made of synthetic
10 material. Moreover, since it is made of shortcrust pastry, the edible cup is “supplied” to the customer as a sweet treat along with the coffee.

Brief description of the drawings

- Further advantages and features of the invention are more apparent in the detailed
15 description which follows, with reference to the accompanying drawings, which illustrate an example of it without limiting the scope of the invention, in which:

Figure 1 is a perspective view of the invention;

Figure 2 illustrates the invention according to the cross-section II - II of Figure 1.

Detailed Description of the Preferred Embodiments of the Invention

- In particular, the edible cup comprises a cup-shaped main body 1, constituted of shortcrust pastry, and an inner coating 2, constituted of an insoluble icing. The inner coating 2 allows the invention to be made impermeable and prevents the beverage contained in it from dissolving the cup 10 and automatically becoming
25 sweet by absorbing the sugar contained in the shortcrust pastry.

- Production of the shortcrust pastry coffee cup 10, as characterised in the claims, is possible thanks to a method structured in the following steps: initially, a shortcrust pastry dough is prepared (which may be of the traditional type, obtained using wheat flour, or in other variants, for example, using flour that is made of Kamut,
30 vegan, organic, or spinach with matcha).

Unlike what happens traditionally, first the butter and sugar are mixed to combine them until a cream is obtained, then the egg yolks and whites are added to combine them with the cream made from the butter and sugar, then finally the flour is added.

- 5 Even the quantities of the various ingredients are very different to those normally used. In fact, to obtain approximately 10 kilograms of dough, suitable for making approximately 270 cups 10, the use is recommended of approximately 5.5 kilograms of flour, approximately 1 kilogram of egg yolks, approximately 1.7 kilograms of sugar, approximately 1.3 kilograms of 99% anhydrous butter and
10 approximately 500 grams of egg white, if necessary with the addition of potassium sorbate.

With the dough obtained in this way, avoiding resting times that could compromise its consistency, small balls or small disks are created, weighing between 20 and 100 grams. Then, the small balls (or small disks) are cold-formed
15 into a cup shape, using a mould and a counter-mould that can be heated to different temperatures.

Once the small balls (or small disks) have been inserted in that machine, the action of the mould and counter-mould shapes the small ball (or small disk) into a cup shape. Then comes the cooking of the inside and outside of the cup at
20 different temperatures. The inside is cooked at temperatures of between 180 and 230 °C. The outside is cooked at temperatures of between 200 and 250 °C. In total, the method for cooking the cup-shaped shortcrust pastry lasts between 2 and 5 minutes.

After cooking, the inside of the cup is coated with an insoluble icing.

- 25 The icing consists of egg white and sugar mixed in such a way that the icing withstands heat. For the example above (approximately 10 kg of dough), it is recommended that approximately 1.6 kilograms of egg white be beaten until stiff, then 7.4 kilograms of sugar and any flavourings necessary be added to them.

The icing is heated to temperatures of between 180 and 230°C for a time of
30 between 5 and 20 seconds, and is spread over the inside of the cups 10, which are

then returned to the oven at a temperature of approximately 50 °C so that they dry more quickly.

CLAIMS

1. An edible cup, characterised in that it comprises a cup-shaped main body
1, constituted of shortcrust pastry, and an inner coating 2, constituted of an
5 insoluble icing.
2. The cup according to claim 1, characterised in that the shortcrust pastry is
made of butter, with a percentage by weight of between 10 and 15%, sugar, with a
percentage by weight of between 15 and 20%, egg yolks, with a percentage by
weight of between 8 and 12%, egg whites, with a percentage by weight of
10 between 4 and 6%, flour, with a percentage by weight of between 50 and 60%.
3. The cup according to claim 1, characterised in that the icing is made of egg
whites, with a percentage by weight of between 15 and 20%, and sugar, with a
percentage by weight of between 80 and 85%.
4. The cup according to claim 1, characterised in that the weights of the icing
15 and of the shortcrust pastry are in a ratio to one another of between 4/5 and 1.
5. The cup according to claim 1, characterised in that the shortcrust pastry of
which the main body is made comprises wheat flour, or flour that is made of
Kamut wheat, vegan, organic or spinach with matcha.
6. A method for making an edible cup, characterised in that it comprises at
20 least the following steps:
 - preparing a shortcrust pastry dough;
 - immediately creating agglomerates using the shortcrust pastry dough;
 - cold forming the agglomerates in cup-shaped moulds;
 - double cooking, of the inside and the outside of the cup;
 - 25 - covering the inside of the cup with an insoluble icing;
 - heating the icing.
7. The method according to claim 6, characterised in that the agglomerates of
shortcrust pastry weigh between 20 and 100 grams.
8. The method according to claim 6, characterised in that the moulds for cold
30 forming comprise a mould and a counter-mould which can be heated to different

temperatures.

9. The method according to claim 6, characterised in that inner cooking is carried out at temperatures of between 180 and 230 °C.

10. The method according to claim 6, characterised in that outer cooking is
5 carried out at temperatures of between 200 and 250 °C.

11. The method according to claim 6, characterised in that cup cooking lasts for between 2 and 5 minutes.

12. The method according to claim 6, characterised in that heating of the icing is carried out at temperatures of between 180 and 230 °C for a time of between 5
10 and 20 seconds.

13. The method according to claim 6, characterised in that the step of preparing a shortcrust pastry dough weighing approximately 10 kilograms is structured as follows:

- mixing cold butter and sugar, in quantities that by weight are respectively
15 between 1.0 kilograms and 1.5 for the butter and between 1.5 and 2.0 kilograms for the sugar, until a cream is created;
- adding egg yolks and egg whites, in quantities that by weight are respectively between 0.8 kilograms and 1.2 kilograms for the yolks and between 0.4 and 0.6 kilograms for the whites, to be combined with the cream;
- 20 - adding flour in a quantity of between 5.0 and 6.0 kilograms;
- creating a block.

14. The method according to claim 6, characterised in that the insoluble icing comprises egg white and sugar mixed in quantities that are respectively between 15 and 20% for the whites and between 80 and 85% for the sugar.

25 15. The method according to claim 13 or 14, characterised in that the weights of the icing and of the shortcrust pastry dough are in a ratio to one another of between 4/5 and 1.

16. The method according to claim 6 or 7, characterised in that the agglomerates of shortcrust pastry have the shape of small balls or small disks.

FIG. 1/1

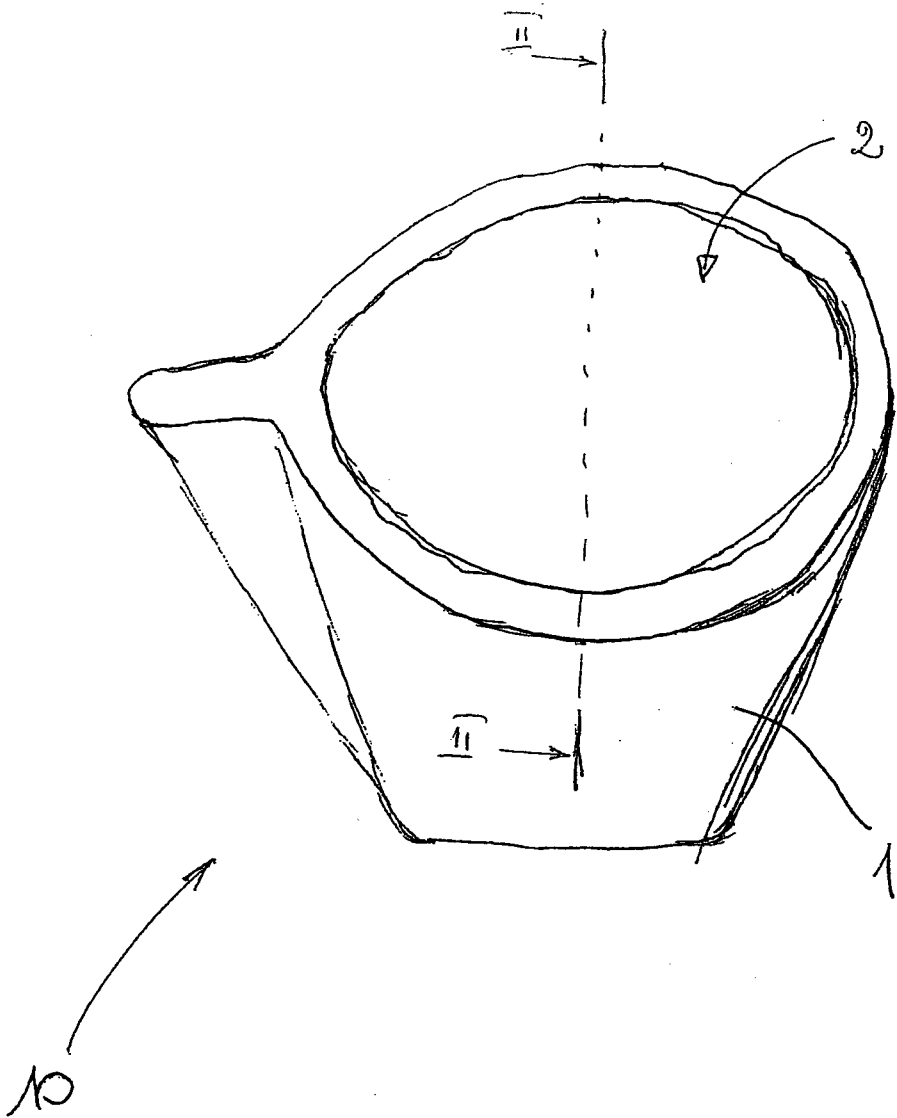


FIG. 1

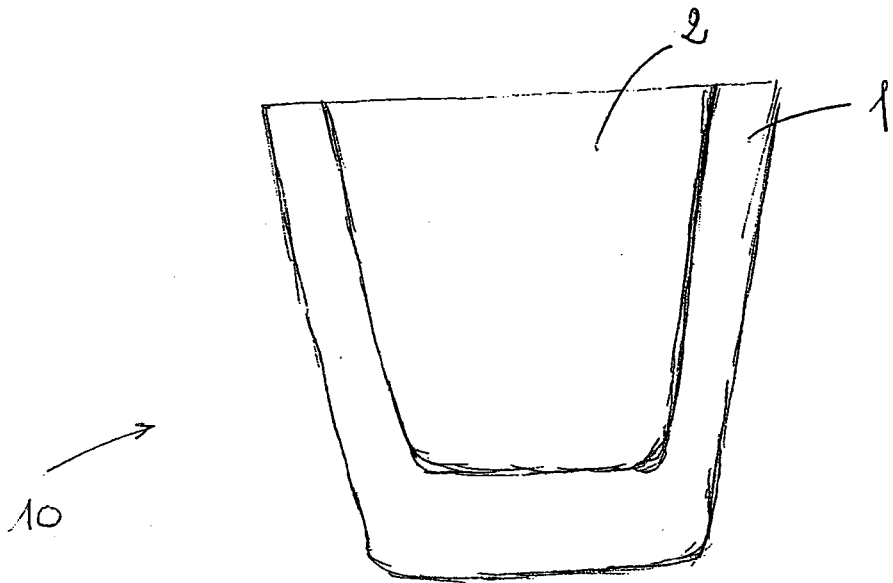


FIG. 2

INTERNATIONAL SEARCH REPORT

International application No
PCT/SM2016/000011

A. CLASSIFICATION OF SUBJECT MATTER

INV. A21D8/02 A21D8/06 A21D13/08 A21D15/08 A23P20/00
ADD.

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)

A23P A23L A21D

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)

EPO-Internal, BIOSIS, FSTA, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	FR 2 437 996 A1 (GANTZER JEAN LOUIS) 30 April 1980 (1980-04-30) figure 1	1-5
Y	WO 2006/135989 A1 (TORPEDO IPR PTY LTD [AU]; PRATT CLAYTON [AU]; HOGAN WILLIAM THOMAS [AU]) 28 December 2006 (2006-12-28) page 7; figures 1-4	6-16
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Further documents are listed in the continuation of Box C.



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

"E" earlier application or patent but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

International application No
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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