UK Patent Application (19) GB (11) 2 099 277

A

- (21) Application No 8136855
- (22) Date of filing 7 Dec 1981
- (30) Priority data
- (31) 267742
- (32) 28 May 1981
- (33) United States of America
 (US)
- (43) Application published 8 Dec 1982
- (51) INT CL³
 - A23L 1/176
- (52) Domestic classification **A2B** 315 402 602 603 604 615 616 618 625 660 BCX
- (56) Documents cited GB 2056838 A GB 2039206 A GB 2019188 A GB 1584404 GB 1293404 US 4068009
- (58) Field of search A2B
- (71) Applicants
 Modern Maid Food
 Products Inc.,
 200 Garden City Plaza,
 Garden City,
 New York 11530,
 United States of America
- (72) Inventor Bin Yea Chiang
- (74) Agents
 R. G. C. Jenkins and Co.,
 Chancery House,
 53/64 Chancery Lane,
 London WC2A 1QU

(54) Bread crumb coating composition

(57) A bread crumb coating composition for coating a comestible to be prepared by frying includes bread crumbs having an elongated, porous and striated shape and structure formed from a mixture comprising a wheat protein source or a vegetable gum, starch, yeast, a fermentable carbohydrate and an oxidizing agent. The bread crumbs have extended frying tolerance while retaining the said shape and structure.

SPECIFICATION

Improved Japanese-style bread crumbs

The present invention relates in general to a bread 5 crumb coating composition for coating a comestible to be prepared by deep-fat frying and, more particularly, to a bread crumb coating composition including improved Japanese-style bread crumbs adapted 10 to have extended deep-fat drying tolerance and to retain their desirable crumb characteristics such as elongated, porous and striated shape and structure.

The use of conventional Japanese-style bread crumbs has become increasingly popular because of 15 their unique elongated, porous and striated shape and structure which upon eating imparts exceptional crispness to a coated comestible, for example, as disclosed in U.S. Patent Nos. 4,208,422 and 4,068,009. The porous structure of such Japanese-20 style bread crumbs results in their having a low bulk density in the order of about 10 to 14 pounds per cubic foot compared to about 35 to 40 pounds per cubic foot which is typical of conventional breading. From an organoleptic viewpoint, it is desirable to 25 have such low bulk density and porous bread crumbs because of their superior taste characteristics. However, the porous structure of Japanesestyle bread crumbs creates various problems during the deep-fat frying of comestibles coated therewith.

In particular, for a large variety of coated comest-30 ibles or ones that require extended deep-fat frying to cook, the bread crumbs are susceptible to the intense heat of the frying oil and often degrade by losing their desirable crumb characteristics and by 35 developing a color which is objectionably dark and possessive of an undesirable burnt taste. It is contemplated that the frying oil penetrates the porous structure of the Japanese-style bread crumbs during the frying process and quickly degrades them by 40 being able to contact their relatively large surface area simultaneously, thereby multiplying the degradation effect of the intense heat of the frying oil. Denser conventional breading which are typically flat and secured close to the surface of the coated 45 comestible are not as susceptible to this degradation because they are somewhat protected by their close proximity to the cooler comestible being heated.

This problem of degradation of conventional Japanese-style bread crumbs is generally common 50 in fast-food restaurants where the infrequent replacement of the frying oil often results in such oil becoming what is commonly referred to as "broken down." The frying of comestibles coated with conventional Japanese-style bread crumbs in so-called 55 "broken down" frying oil often results in a significantly darker coating color in comparison with coated comestibles deep-fat fried in "fresh" oil. This significantly darker color of the comestible coating is considered a serious product quality defect to fast food 60 restaurants. In this regard, it is known that the excessive darkening of conventional Japanese-style bread crumbs by degradation can be reduced by lowering the frying oil temperature. However, although this will reduce the degradation and resulting coating 65 color darkening rate, it also extends the time

required to fry the coated comestible and results in a greasy tasting food product.

In preparing such coated comestibles by deep-fat frying, a chef often looks to the color of the coating 70 to determine when a frying product is sufficiently heated to be served. The degradation of the coating to an objectionable dark color often results in the premature removal of the coated comestible from the frying oil before it has been sufficiently heated, 75 resulting in the serving of a food product having an unacceptable cold interior. This inability of conventional Japanese-style bread crumbs to withstand extended deep-fat frying is of greater significance when using pretoasted Japanese-style bread 80 crumbs which are initially toasted to an attractive yellow to brown color. The use of such pretoasted Japanese-style bread crumbs limits the coated comestibles to deep-fat frying for only a relatively short period of time, i.e., about 3 to 5 minutes at 330 to 85 360° F, which time is generally insufficient to properly heat the interior of the food product, in particular, those which require extended deep-fat frying.

Accordingly, there is a need for improved Japanese-style bread crumbs for coating comest-90 ibles therewith to be deep-fat fried, which coatings retain their desirable crumb characteristics and retain an attractive yellow to brown color during extended deep-fat frying.

According to the present invention, there is pro-95 vided a bread crumb coating composition including improved Japanese-style bread crumbs which overcomes or avoids one or more of the foregoing disadvantages from the use of conventional Japanesestyle bread crumbs for coating comestibles to be 100 deep-fat fried. Generally, it is within the contemplation of the present invention to provide improved Japanese-style bread crumbs which retain their desirable crumb characteristics of elongation, porosity and striated shape and structure, and which have extended deep-fat frying tolerance such that they 105 retain their attractive color during extended deep-fat frying.

According to the present invention, there is provided a bread crumb coating composition for coat-110 ing a comestible to be prepared by frying, said composition including bread crumbs having an elongated, porous and striated shape and structure formed from a mixture comprising a wheat protein source, a fermentable carbohydrate and yeast, and 115 wherein said mixture further includes starch and an oxidizing agent such that said bread crumbs have extended frying tolerance while retaining their elongated, porous and striated shape and structure.

The present invention relates in general to 120 improved Japanese-style bread crumbs for coating a food product which is to be subsequently deep-fat fried. What is meant by Japanese-style bread crumbs are bread crumbs having an elongated, porous and striated shape and structure which, upon 125 eating, imparts exceptional crispness to the coated food product. The improved Japanese-style bread crumbs according to the present invention allows the coated food product to be deep-fat fried for an extended period without the coating thereon becom-

130 ing objectionably dark in color with an associated

undesirable burnt taste. In addition, the improved Japanese-style bread crumbs are found to retain their desirable crumb characteristics, i.e., elongation, porosity, striation and bulk density. As a result, the use of improved Japanese-style bread crumbs in accordance with the present invention provides food products with an attractive yellow to brown color even when subjected to extended deep-frying and when processed in "broken down" oil as is generally common in fast-food restaurants.

The improved Japanese-style bread crumbs are produced from a dough mixture generally including a wheat protein source, starch, yeast, a fermentable carbohydrate and an oxidizing agent. Other ingre-15 dients such as salt, oil, and a complexing agent for the starch can be incorporated into the dough mixture. The resulting bread crumbs form a coating composition having a typical Japanese-style appearance, i.e., elongated, porous and striated 20 shape and structure. Coated food products deep-fat fried using the improved Japanese-style bread crumbs result in a pleasant light golden brown color even when subjected to extended deep-fat frying. Food products such as fish, poultry and meat are 25 particularly suitable for deep-fat frying using a bread crumb coating composition including the improved Japanese-style bread crumbs in accordance with the present invention.

The above-mentioned ingredients of the improved 30 Japanese-style bread crumbs may be selected from a variety of sources. For example, although patent wheat flour is preferred as a wheat protein source, vital wheat gluten can be substituted for the patent wheat flour in whole or in part. The patent wheat 35 flour can be enriched or unenriched and of the bleached or unbleached type. In addition, although not a wheat protein source, it is contemplated that a vegetable gum such as xanthan and carboxymethylcellulose can be used as a substitute for the wheat 40 protein source. The patent wheat flour and vital wheat gluten, as a wheat protein source, give cohesiveness to the dough mixture such that the improved Japanese-style bread crumbs formed therefrom have extended deep-fat frying tolerance 45 while retaining their desirable crumb characteristics.

Although wheat starch is preferred in substituting a part of the wheat protein source in the dough mixture for forming improved Japanese-style bread crumbs in accordance with the present invention, 50 other starch sources such as corn, rice, tapioka, potato and combinations thereof may be used. The wheat protein source may be substituted by incorporating such starch into the dough mixture in the range of from about 5 to 90 percent by weight of the 55 wheat protein source, and having a preferred substitued starch in the amount of from about 20 to 40 percent. Where patent wheat flour is the predominent source of protein, starch may be substituted for the patent wheat flour in an amount of from about 5 60 to 50 percent. However, as the amount of patent wheat flour decreases below about 50 percent, it is contemplated that there is not sufficient protein in the remaining patent wheat flour to give the required cohesiveness to the dough mixture to produce bread 65 crumbs having extended deep-drying tolerance and

retention of the desirable cellular and organoleptic characteristics. In this regard, as the amount of substituted starch increases above about 50 percent, vital wheat gluten is included with the patent wheat 70 flour in increasing amounts as a wheat protein source to help carry the high level of starch present. It is expected that when the starch content reaches about 90 percent, the 10 percent wheat protein source will comprise all vital wheat gluten with little 75 or no patent wheat flour being present, thereby providing improved Japanese-style bread crumbs in accordance with the present invention with extended deep-fat frying tolerance and retaining the desirable Japanese-style crumb characteristics.

80 It is contemplated that the oxidizing agent incor-

80 It is contemplated that the oxidizing agent incorporated into the dough mixture in accordance with the present invention affects the disulfide bonds in the flour to bring about additional strength thereby producing extended deep-fat frying tolerance of the improved Japanese-style bread crumbs formed therefrom and retention of their desirable crumb characteristics. Such oxidizing agents include potassium bromate in an amount of from about 10 to 20 ppm, potassium iodate in an amount of about less
 90 than about 15 ppm and ascorbic acid in an amount of from about 30 to 60 ppm, based on the total amount of the wheat protein source and starch present in the dough mixture.

The yeast included in the dough mixture can be 95 any type which produces the necessary leavening effect and can be either added or naturally occurring yeast. The remaining ingredients are added to the dough mixture for a variety of reasons. In particular, the oil is considered a dough lubricant which 100 enhances the machineability of the dough during processing. Salt, such as sodium acetate, potassium chloride, calcium chloride, vinegar, etc., are added as a flavor enhancer and as an electrolyte required for the subsequent dielectric baking of the dough mixture. However, when other than dielectric baking is used, the salt or electrolyte may be eliminated. The fermentable carbohydrate is considered to be acted upon by the yeast to porduce carbon dioxide to form the porous bread crumb structure. Such fermentable carbohydrates as cane sugar, dextrose, honey and corn syrup can be used for this purpose. Further, a small quantity of a complexing agent such as sodium stearoly lactylate is added to the dough mixture to aid in creating a firmer bread structure.

115 In accordance with the present invention, a bread crumb coating composition for forming a coated comestible to be prepared by deep-fat frying wherein such coating has extended deep-fat frying tolerance and retains desirable crumb characteristics will now be described in detail. The coating composition is produced from a dough mixture generally including patent wheat flour or vital wheat gluten as a source of protein to which is added starch and a small quantity of yeast, sugar, salt and an oxidizing 125 agent such as potassium bromate. For example, one such composition includes patent wheat flour -1,000 parts, wheat starch - 200 parts, dry yeast - 18 parts, salt - 11 parts, sugar - 12 parts and potassium bromate - 0.012 parts.

130 The dough mixture was dielectrically baked,

cooled, subsequently ground using a Fitzmill and then air dried. The resulting bread crumbs were found to have a typical Japanese-style appearance, i.e., elongated, porous and striated shape and struc-5 ture. Coated food products deep-fat fried using the improved Japanese-style bread crumbs in accordance with the present invention resulted in a pleasant light golden brown coating color even when subjected to extended deep-fat frying and retained their 10 desirable crumb characteristics. Such results of extended deep-fat frying tolerance and retention of desirable crumb characteristics were also found when the improved Japanese-style bread crumbs were pretoasted before coating a comestible there-15 with prior to being deep-fat fried.

The bread crumb coating composition including improved Japanese-style bread crumbs in accordance with the present invention was coated onto a batter-coated comestible which was subsequently 20 deep-fat fried. The batter used to coat the comestible is not critical and may be of any formulation suitable for bread crumbs to adhere to as is common in the art. Some examples of suitable batters are egg, egg and water, egg and milk, flour, flour and milk, flour 25 and water, flour and egg, flour dusting then water, starch and water, starch and milk, gum and water, gum and milk, barbeque sauce, etc. The comestible can be coated with batter by dipping, spraying, immersing, etc., the comestible. Preferably, the 30 comestible is first flour dusted prior to batter coating as this results in a more continuous adhering coating.

The batter-coated comestible can be coated with the bread crumb coating composition including 35 improved Japanese-style bread crumbs of the present invention by means common in the art, such as applying the coating composition to the battercoated comestible in a closed bag containing the coated composition, or completely covering the 40 batter-coated comestible with a coating composition and then pressing the coating composition firmly onto the batter-coated comestible.

After applying the bread crumb composition to the batter-coated comestible, such coated comestible is 45 deep-fat fried generally at an oil temperature of about 350° F for approximately 5 to 12 minutes, i.e., extended deep-fat frying. It has been found that the bread crumb coating composition including improved Japanese-style bread crumbs in accor-50 dance with the present invention retains its desirable crumb characteristics and does not become soggy or lose its crispness even after retaining a significant amount of oil during the deep-fat frying and thereafter standing for a relatively long period of time.

55 These unique characteristics enable a bread crumb coating composition to be prepared which, when applied onto a batter coated comestible and deep-fat fried, results in a comestible with an appealing taste and texture.

When the comestible is coated and deep-fat fried ൈ in accordance with the present invention, the resultant comestible is found to have a continuous and uniform coating. This coating is found to retain the desirable Japanese-style crumb characteristics of 65 elongation, porosity, and striated shape and struc-

ture even during extended deep-fat frying. In addition, the resulting coating is found to have extended deep-fat frying tolerance such that the coating does not become objectionably dark in color with an 70 associated undesirable burnt taste during extended deep-fat frying. Further, improved Japanese-style bread crumbs in accordance with the present invention can be pretoasted to a uniform golden brown color, yet coatings formed therefrom are shown to 75 have an extended deep-fat drying tolerance.

The following examples are considered illustrative of the principles and applications of the present invention. It should be understood, however, that these examples are merely meant to be illustrative 80 and the present invention is not to be limited thereby.

EXAMPLE I

The following ingredients and process were employed in preparing the improved Japanese-style 85 bread crumbs in accordance with the present invention:

	Patent Wheat Flour	1,000 parts
	Wheat Starch	200 parts
	Dry Yeast	18 parts
90	Oil	12 parts
	Salt	11 parts
	Sugar ·	12 parts
	Potassium Bromate	0.012 parts
	Sodium Stearoyl Lactylate	6 parts
95		

100

Into a portion of 775 parts of water, the dry yeast and sugar were dissolved and into another portion of the water the salt was dissolved. The remaining dry ingredients were dry blended, the fluids were added and the dough mixed until developed, about 6 minutes at medium speed with a dough hook. The dough was then allowed to ferment until about double in size at 80° F which required about 30 minutes. Afterwards, the dough was rounded, placed into a 105 baking pan and allowed to proof at 80° F, 90 percent relative humidity until about double in size. The dough was then dielectrically baked until the steaming and amperage draw subsided, cooled, ground in a Fitzmill and then air dried. A portion of the 110 improved Japanese-style bread crumbs made in accordance with this Example were toasted to a light golden color. The bread crumbs were examined and found to have a typical Japanese-style, i.e., elongated, porous, and striated shape and structure.

115 Both the toasted and untoasted version of the improved Japanese-style bread crumbs in accordance with this Example were applied as a coating onto a batter-coated shrimp product. For comparison, conventional, commercially-available 120 Japanese-style bread crumbs were also applied concomitantly onto batter-coated shrimp, allowed to freeze and subsequently deep-fat fried at 350° F for up to 12 minutes. The conventional Japanese-style bread crumbs were identified as Product No. 6062 manufactured by Modern Maid Food Products, Inc., Product No. 6000 and Product No. 6001, both manufactured by Newly Weds Foods. The bread crumbs identified as Product No. 6062 and Product No. 6000 were untoasted bread crumbs while those desig-

nated as Product No. 6001 were a toasted bread

20

25

30

crumb. The ingredient declaration for the three comparison products listed flour as the only farinaceous component and did not include starch as

a bread crumb ingredient.

5 Table I shows the results of the extended deep-fat frying test in accordance with this Example.

TABLE I

	Example I				
	Untoasted	Toasted	6062	6000	6001
Unfried Color	White	Light Golden	White	White	Light Golden
Fried Color	Light Golden Brown	Light Golden Brown	Dark Brown	Dark Brown	Dark Brown

As a result of the extended deep-fat frying, it was found that the improved Japanese-style bread crumbs in accordance with Example I, whether 10 toasted or untoasted, both resulted in a finished coated comestible having a pleasant light golden brown crust color while the three conventional products were unacceptably dark, almost burnt in appearance. It is thus apparent that the inclusion of 15 starch and an oxidizing agent results in improved Japanese-style bread crumbs having extended deep-fat frying tolerance while retaining their desirable crumb characteristics of elongation, porosity and striated shape and structure.

EXAMPLE II

The following ingredients were used in accordance with this Example of the present invention:

Patent Wheat Flour 600 parts
Wheat Starch 600 parts
Dry Yeast 24 parts
Salt 11 parts
Sugar 12 parts
Potassium Bromate 0.024 parts
Sodium Stearoyl Lactylate 6 parts

The dough preparation and process of Example I were followed except that only a total of 730 parts of water were used. This reduction in water was due to the lower absorption of starch compared to flour and 35 was required to maintain optimum dough consistency. The resulting bread crumbs were again found to have the desirable typical Japanese-style attributes and were again prepared in both an untoasted and toasted version. The bread crumbs prepared in accordance with this Example, as well as the aforedescribed conventional Product No. 6062 were applied to batter-coated raw chicken pieces. The three samples were simultaneously deep-fat fried at from 315 to 330° F for 14 minutes until fully cooked.

Table II shows the results of the extended deep-fat frying test including taste and texture.

TABLE II

	Example II		6062
	Untoasted	Toasted	
Unfried Color	White	Yellow- Gold	White
Fried Color	Light Golden	Light Golden	Dark Brown
Taste	Pleasant	Pleasant	Slightly Burnt
Texture	Crispy	Crispy	Crispy

It was observed that the fried chicken coated with the improved Japanese-style bread crumbs in accordance with Example II could have easily been 50 deep-fried several additional minutes without developing an excessively dark crust color while the conventional bread crumbs, i.e., Product No. 6062, was noticed to have developed an acceptable medium golden color only after 5 to 6 minutes,
55 whereat the chicken would have been significantly undercooked. At the required cooking time of 14 minutes, the fried chicken using the conventional bread crumbs became objectionably dark brown and

had a slightly burnt taste.

EXAMPLE III

The following ingredients were used in accordance with this Example of the present invention:

	Wheat Starch	1920 parts
	Vital Wheat Gluten	480 parts
	Sodium Stearoly Latylate	12 parts
	Potassium Bromate	0.048 parts
10	Salt	22 parts
	Sugar	24 parts
	Active Dry Yeast	48 parts

In accordance with this Example, half of the dough was processed essentially as described in Example I and the other half was processed using the so-called "no time" dough process. The latter process differed from the conventional bread making process in that the mixed dough was transferred directed into the

20 baking pans and allowed to ferment and proof all in one step before being baked. Thereafter, all the loaves were handled identically. The conventionally baked bread will be referred to as IIIA and the "no time" crumbs as IIIB. No toasted bread crumbs were

25 prepared with the composition of Example III.

EXAMPLE IV

The following ingredients were used in accordance with this Example of the present invention:

30	Wheat Starch	86.63 parts
	Patent Wheat Flour	5.78 parts
	Vital Wheat Gluten	3.82 parts*
	Potassium Bromate	0.0019 parts
	Salt	0.88 parts
35	Sugar	0.96 parts
	Active Dry Yeast	1.92 parts

Again, two different processes were used similar to that described in Example III, which produced,

40 respectively, bread crumbs designated IVA and IVB. *EXAMPLE V*

The following ingredients used in accordance with this Example of the present invention:

45	Wheat Starch	86.63 parts
	Vital Wheat Gluten	9.63 parts
	Potassium Bromate	0.0019 parts
	Salt	0.88 parts
	Sugar	0.96 parts
50	Active Dry Yeast	1.92 parts

The process as set forth in Example I was followed essentially to prepare the improved Japanese-style bread crumbs in accordance with this Example.

EXAMPLE VI

The following ingredients were used in accordance with this Example of the present invention:

	Wheat Starch	1080 parts
60	Vital Wheat Gluten	120 parts
	Sodium Stearoly Latylate	6 parts
	Potassium Bromate	0.024 parts
	Salt	11 parts
	Sugar	12 parts
65	Active Dry Yeast	24 parts

The process as set forth in Example I was followed essentially to prepare the improved Japanese-style bread crumbs in accordance with this Example.

The improved Japanese-style bread crumbs of
Examples IIIA and IIIB were applied to batter-coated,
par-boiled chicken pieces along with commercially
available conventional Japanese-style bread crumbs
designated as Product No. 6062. The coated chicken
was frozen and later fried at about 330 to 340° F for 8

75 minutes. The results of the extended deep-fat frying tests are shown in Table III.

TABLE III

55

// IDE= 11		
Bread Crumbs	Crumb Appearance	Fry Color
6062	Typical – Good	Dark Brown
Example IIIA	Typical – Good	Light Golden Brown
Example IIIB	Fair to Good	Lighter Golden Brown

As evidenced from the results shown in Table III, improved Japanese-style bread crumbs prepared in accordance with the present invention result in a bread crumb coating composition having extended deep-fat frying tolerance while retaining its desirable crumb characteristics.

The improved Japanese-style bread crumbs prepared in accordance with Examples IVA and IVB,

Example V and Example VI were applied to batter-coated fish portions and fried for 12 minutes at about 340 to 360° F. The improved Japanese-style bread crumbs retained their desirable crumb characteristics of elongation, porosity and striated shape and structure even after the extended deep-fat drying.

The fried color obtained by the coating as a result of the extended deep-fat frying are shown in Table IV.

TABLE IV

Bread Crumb	Fry Color
6062	Very Dark Brown
Example IVA	Medium Light Golden Brown
Example IVB	Medium Light Golden Brown
Example V	Medium Light Golden Brown
Example VI	Light Golden Brown

It is evident from the deep-fat frying results shown in Table IV that improved Japanese-style bread crumbs prepared from a dough mixture including starch and an oxidizing agent, result in such bread 5 crumbs having extended deep-fat frying tolerance while retaining their desirable crumb characteristics in comparison to conventional Japanese-style bread crumbs.

In accordance with the present invention, a bread
10 crumb coating composition has been described for
forming a coated comestible to be heated by deepfat frying until the coating thereon has achieved a
uniform golden brown color, said composition
including bread crumbs having an elongated, por15 ous and striated shape and structure formed from a
mixture comprising a wheat protein source selected
from the group consisting of patent wheat flour, vital
wheat gluten and mixtures thereof, 5 to 90 percent
substituted starch by weight of the wheat protein
20 source, yeast, a fermentable carbohydrate, salt and
an oxidizing agent, wherein the bread crumbs have
extended deep-fat frying tolerance in order to retain
the uniform golden brown color during the deep-fat

25 striated shape and structure.
 Although the invention herein has been described with reference to particular embodiments, it is to be understood that these embodiments are merely illustrative of the principles and application of the

 30 present invention. It is to be understood that numerous modifications may be made in the illustrative embodiments and other arrangements may be devised without departing from the spirit and scope of the present invention as defined by the appended
 35 claims.

frying while retaining their elongated, porous and

CLAIMS

- A bread crumb coating composition for coating a comestible to be prepared by frying, said composition including bread crumbs having an elongated, porous and striated shape and structure formed from a mixture comprising a wheat protein source or a vegetable gum, a fermentable carbohydrate, and yeast, and wherein said mixture further includes starch and an oxidizing agent such that said bread crumbs have extended frying tolerance while retaining their elongated, porous and striated shape and structure.
- A bread crumb coating composition as set forth in Claim 1, wherein said wheat protein source
 is selected from the group consisting of patent wheat flour, vital wheat gluten and mixtures thereof.

- A bread crumb coating composition as set forth in Claim 1, wherein said starch is selected from the group consisting of wheat starch, corn starch, rice starch, tapioca starch, potato starch and mixtures thereof.
- A bread crumb coating composition as set forth in Claim 1, wherein said oxidizing agent is selected from the group consisting of potassium 60 bromate, potassium iodate and ascorbic acid.
 - 5. A bread crumb coating composition as set forth in Claim 1, wherein said wheat protein source comprises patent wheat flour when said starch is present in an amount of from about 5 to 50 percent.
- 65 6. A bread crumb coating composition as set forth in Claim 1, wherein said wheat protein source comprises a mixture of patent wheat flour and increasing amounts of vital wheat gluten when said starch is present in an amount of from about 50 to 90 percent.
 - 7. A bread crumb coating composition as set forth in Claim 1, wherein said wheat protein source comprises vital wheat gluten when said starch is present in an amount of about 90 percent.
- 8. A bread crumb coating composition as set forth in Claim 1, wherein said oxidizing agent is selected from the group consisting of potassium bromate in an amount of from about 10 to 20 ppm, potassium iodate in an amount of about less than about 15 ppm, and ascorbic acid in an amount of from about 30 to 60 ppm, based on the total amount of said wheat protein source and said starch present in said bread crumbs.
- 9. A bread crumb coating composition as set forth in any one of the preceding claims, wherein said vegetable gum is selected from the group consisting of xanthan and carboxymethylcellulose.
- 10. A bread crumb coating composition for coating a comestible to be prepared by frying substan-tially as described with reference to any one of the Examples.

Printed for Her Majesty's Stationery Office by The Tweeddale Press Ltd., Berwick-upon-Tweed, 1982.

Published at the Patent Office, 25 Southampton Buildings, London, WC2A 1AY, from which copies may be obtained.

ì