

Review of the world patent information for March'2016 on the topic "biotechnology of cheeses: cheese, cheese preparations and making thereof"

Information on the topic selected from all over the world

Method for production of combined rennet cheese or cheese products using phospholipase a1 or a2 based on technology with separate pasteurization of dairy mixture

RU 2577109 (Russia)

Int. Cl. (*International patent classification*) A23C 19/032, A23C 19/055

Application: 2015100718, 12.01.2015

Date of publication: 10.03.2016

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Proprietor: Vezirjan Andrej Arshavirovich (RU)

Abstract

Field: Dairy industry.

Substance: Invention relates to dairy industry. Method of producing a cheese product comprises concentrating skim milk by ultrafiltration to casein content in retentate of at least 3 % and obtaining a retentate, preparing emulsifying bases, preparing a coarse emulsion, homogenizing emulsion, mixing emulsion with retentate of skim milk to a desired ratio between fat and protein in dairy mixture, pasteurizing fat-normalised dairy mixture, cooling dairy mixture to a temperature of coagulation, feeding mixture into a cheese-making machine, producing combined rennet cheese or a cheese product, wherein according to invention is carried out enzymatic modification of phospholipid emulsifying bases via phospholipase A1 or A2, and retentate prior to normalization is pasteurized at 92 ± 2 held at 20 ± 2 and cooled to $15\pm 2^\circ\text{C}$.

Effect: Invention increases output of product, increases efficiency of equipment, reduces loss of fat and cheese mass (casein dust) in production process, intensifies production process and obtain a product with a given fatty acid composition, and increases its nutritional and biological value.

Bite-size smoked cheese and method for producing same

CN 105392369 (China)

Int. Cl. A23C 19/08, A23C 19/14;

Applicant: MEIJI CO., LTD. (JP);

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Application: 2014839293, 08.07.2014,

Date of publication: 09.03.2016;

Priority data: 2014 JP 68 147, 08.07.2014, PCT; 2013 0 144 018, 09.07.2013, Japan.

Abstract

The purpose of the present invention is to develop a bite-size smoked cheese which has a robust smoked flavor while preventing a deterioration in texture caused by a hard film forming on the surface of the cheese that has been smoked. It was discovered that by smoking 40 to 70% of the total surface area of a bite-size cheese while leaving the remaining surface unsmoked, obtained is a bite-size smoked cheese which enables a robust smoked flavor and the original flavor of the cheese to be simultaneously tasted, and which has a good melt-in-your-mouth quality and is highly palatable.

Process for production of colourless vat milk and colourless cheese obtained therefrom

US 2016058026 (USA)

Int. Cl. A23C 19/00, B01D 61/02, B01D 61/14, B01D 63/08, B01D 63/10, B01D 71/06, B01D 71/68; **Applicant:** DMK DEUTSCHES MILCHKONTOR G.M.B.H. (DE);

Application: 201514839202, 28.08.2015,

Date of publication: 03.03.2016;

Priority data: 2014 0 182 971, 30.08.2014, PCT.

Abstract

A process for producing colourless vat milk is proposed, in which (a) vat milk is subjected to an ultrafiltration and in the course of this a first permeate P1 and a first retentate R1 are produced; (b) the permeate P1 is subjected to a reverse osmosis and in the course of this a second permeate P2 and a second retentate R2 are produced, (c) the second retentate R2 is treated with an adsorbent and in the course of this a further retentate R2* is produced, (d) the resultant retentate R2* is combined with the retentate R1 and the permeate P2.

Blended cheese and meat product

US 2016073652 (USA)

Int. Cl. A23C 19/082;

Applicant: KRAFT FOODS GROUP BRANDS LLC. (US);

Application: 201414484322, 12.09.2014,

Date of publication: 17.03.2016.

Abstract

A pasteurized and blended cheese product containing fatty meat is described. The product includes a portion of natural cheese or a mixture of natural cheeses and an amount of meat provided as inclusions dispersed in the portion of the natural cheese or mixture of natural cheeses. The blended meat and cheese product includes low levels of emulsifying salts to stabilize the meat fat and moisture form the meat, but yet retain the organoleptic characteristics of natural cheese.

Processed cheese without emulsifying salts

US 2016081362 (USA)

Int. Cl. A23C 19/08;

Applicant: KRAFT FOODS GROUP BRANDS LLC. (US);

Application: № 20080143990, 23.06.2008; № 20070007506P, 29.06.2007; № 201514964203, 09.12.2015;

Date of publication: 24.03.2016

Abstract

The present invention is directed to process cheese type products prepared with calcium-reduced ingredients but without emulsifying salts and methods of producing such process cheese type products without emulsifying salts. The process cheeses of the present invention are advantageously resistant to separation during heating and retain desirable organoleptic properties, such as texture, without using emulsifying salts. The process cheeses of the present invention are also lower in sodium than conventional produces cheese products.

Emulsifying salt-free cheese and method of making thereof having a blend of sheared and non-sheared fat

JP 2016508735 (Japan)

Int. Cl. A23C 19/08;

Applicant: KRAFT FOODS GROUP BRANDS LLC (US);

Application: № 20150561496, 03.03.2014,

Date of publication: 24.03.2016;

Priority data: 201313789404, 07.03.2013, USA; 2014 US 19 839, 03.03.2014, PCT.

The formula of the invention (Claims)

- i. A method of making an emulsifying salt-free cheese including a total amount of fat provided from both sheared and non-sheared fat, the method comprising:
- ii. Shearing a pre-mixture of a first portion of the total fat amount and dairy protein to generate an emulsion having sheared fat particles of first size distribution;
- iii. Blending at least one cheese with a second portion of the total fat amount to form a uniform blend having non-sheared fat particles of a second particle size distribution;
- iv. Heating the uniform blend; and
- v. Mixing the emulsion having the sheared fat particles with the uniform blend having the non-sheared fat particles during one of the blending or the heating in a ratio of the sheared fat particles to the non-sheared fat particles from about 10:90 to about 50:50 to form an emulsifying salt-free cheese where one of the shearing, the ratio selection, and mixtures thereof is selected to produce the emulsifying salt-free cheese with a bimodal particle size distribution having a first mode with an average particle size of about 1micron to about 10microns and a second mode with an average particle size greater than about 10microns to about 100microns.

Dairy compositions and method of making

JP 2016028576 (Japan)

Int. Cl. A23C 13/00, A23C 19/00, A23C 9/00, A23C 9/12, A23C 9/14, A23C 9/142, A23C 9/15, A23C 9/152, A23G 3/00, A23G 3/34, A23G 9/00, A23G 9/32, A23G 9/44, A23G 9/52, B01D 63/08, B01D 65/08;

Applicant: SELECT MILK PRODUCERS, INC. (US);

Application: № 20150161160, 18.08.2015,

Date of publication: 03.03.2016;

Priority data: 2006 0 641 468, 18.12.2006, US.

The formula of the invention (Claims)

- i. A method for making a dairy composition comprising the steps of, passing milk into a filtration apparatus in a unidirectional flow;
- ii. Subjecting the milk to an ultrafiltration step to produce an ultrafiltration permeate fraction and a ultrafiltration retentate fraction;
- iii. Subjecting the ultrafiltration permeate to a nanofiltration step to produce a nanofiltration permeate fraction and a nanofiltration retentate fraction;
- iv. Subjecting the ultrafiltration retentate to a diafiltration step to produce a diafiltration permeate fraction and a diafiltration retentate fraction;

- v. Mixing one or more permeate and retentate fractions to form a mixture;
- vi. Heat-treating the mixture at 146[deg.] F.; and,
- vii. Treating the heat-treated mixture with lactase enzyme.

Cheese sauce and method for producing same

WO 2016031953 (International application)

Int. Cl. A23C 19/00, A23C 19/06;

Applicant: MORIKAWA HIROMI (JP);

Application: № 2015 JP 74 358, 28.08.2015,

Date of publication: 03.03.2016;

Priority data: 2014 0 176 643, 29.08.2014, Japan.

Abstract

The purpose of the present invention is to provide: a cheese sauce exhibiting improved cheese flavor and mouth feel, and exhibiting improved emulsion stability and operation properties such as spread ability and squeezing ease; and a method for producing the same. This cheese sauce at least contains: a cheese ingredient; one or more emulsifiers selected from a group consisting of a lipophilic emulsifier having an HLB of 0-2 and a hydrophilic emulsifier having an HLB of 15-20; and water.

Process to produce a microbiologically stable fresh cheese

WO 2016034549 (International application)

Int. Cl. A23C 19/05, A23C 19/068, A23C 19/076, A23C 19/10, A23C 19/11;

Applicant: DSM IP ASSETS B.V. (NL);

Application: 2015 EP 69 886, 01.09.2015,

Date of publication: 10.03.2016;

Priority data: 2014 0 183 687, 05.09.2014, EITB.

Abstract

The invention relates to a process to produce a fresh cheese said process comprising the step of adding natamycin, characterized in that at least part of the natamycin is added to milk before curd formation. Adding natamycin before curd formation results in a cheese wherein the natamycin is distributed throughout the cheese, without substantial loss of natamycin.

Crab juice cheese and preparation method thereof

WO 2016041136 (international application)

Int. Cl. A23C 19/09, A23C 19/093;

Applicant: ZHOU PENGFEI (CN);

Application: № 2014 CN 86 585, 15.09.2014,

Priority data: 24.03.2016.

Abstract

Disclosed is a crab juice cheese and a preparation method thereof, wherein the crab juice cheese contains the following components by mass percent: 5-15% of crab roe, 20-40% of crab meat, 9-27% of cheese, 12-28% of water, 0-15% of fruits, and 0-15% of a thickening agent. The preparation method comprises the steps of firstly pre processing the crab roe and crab meat, cooking the crab roe and crab meat at a high temperature to a paste, chopping the mushy crab roe and crab meat with a device with a coarse screen mesh at a high speed, then extruding with a device with a fine screen mesh, wherein the coarse screen mesh is a 10-30 mesh screen mesh and the fine screen mesh is a 30-80 mesh screen mesh, and mixing the raw materials homogeneously, thereby obtaining the crab juice cheese required. The problem of excessively high levels of sugar and fat in current cheese products is solved, and the commercial value of crab is increased.

Natural cheese exhibiting heat-resistant shape retention and method for manufacturing said cheese

WO 2016043177 (International application)

Int. Cl. A23C 19/068;

Applicant: MEIJI CO., LTD. (JP);

Application: № 2015 JP 76 105, 15.09.2015,

Date of publication: 24.03.2016;

Priority data: 2014 0 188 278, 16.09.2014, Japan.

Abstract

Provided is a natural cheese exhibiting heat-resistant shape retention without loss of the latent natural-cheese composition, and a method for manufacturing said cheese. It was found that adding transglutaminase to a cheese curd of a natural cheese obtained after curdling raw material milk and discharging the whey, and maturing the resulting cheese curd, makes it possible to manufacture a natural cheese exhibiting heat-resistant shape retention. It was found that in this case, a natural cheese exhibiting heat-resistant shape retention can be manufactured without increasing the composition of water and milk protein in the raw material milk. Specifically, it is possible to provide: a novel natural cheese which exhibits excellent heat-resistant shape retention and neither melts nor deforms when cooked or processed such as by heating in a frying pan or an oven; and a method for manufacturing the natural cheese.

Stuffed natural cheese and method for manufacturing same

WO 2016043311 (international application)

Int. Cl. A23C 19/076;

Applicant: MEIJI CO., LTD. (JP);

Application: № 2015 JP 76 675, 18.09.2015,

Date of publication: 24.03.2016;

Priority data: 2014 0 191 970, 19.09.2014, Japan.

Abstract

Provided are stuffed natural cheese stuffed using elastic natural

cheese as an outer layer, and a method for manufacturing the stuffed natural cheese. The elastic natural cheese is made into a stuffed product in a heated state, thereby making it possible to manufacture stuffed natural cheese in which the elastic natural cheese forms the outer layer. In the present invention, it is possible to quantitatively and continuously mass-produce the heretofore difficult-to-produce chewy stuffed cheese by using an ordinary stuffing machine or the like.

Acknowledgements

None.

Conflict of interest

Author declares that there is no conflict of interest.