

A23C

DAIRY PRODUCTS, e.g. MILK, BUTTER, CHEESE; MILK OR CHEESE SUBSTITUTES; MAKING THEREOF (obtaining protein compositions for foodstuffs, [N: e.g. from milk] , A23J1/00; preparation of peptides, e.g. of proteins, in general C07K1/00)

A23C 1/00

Concentration, evaporation or drying (products obtained thereby A23C9/00; making butter powder A23C15/14, cheese powder A23C19/086; evaporating in general B01D1/00)

Definition statement

This subclass/group covers:

Methods for concentration, evaporation or drying.

References relevant to classification in this group

This subclass/group does not cover:

Products obtained by concentration, evaporation or drying	A23C 9/00
Preparation of butter powder	A23C 15/14
Cheese powder	A23C 19/086

Informative references

Attention is drawn to the following places, which may be of interest for search:

Evaporation in general	B01D 1/00
------------------------	---------------------------

A23C 1/01

Drying in thin layers

Definition statement

This subclass/group covers:

Drying in thin layers.

A23C 1/03

on drums or rollers

Definition statement

This subclass/group covers:
Drying in thin layers on drums or rollers.

A23C 1/04

by spraying into a gas stream

Definition statement

This subclass/group covers:
Methods for concentration, evaporation or drying, by spraying into a gas stream (e.g. spray-drying).

A23C 1/045

[N: by simultaneously or separately spraying of two different liquid products other than water or steam; by separate addition of additives other than milk products or lactose in the spray-dryer]

Definition statement

This subclass/group covers:
Methods for concentration, evaporation or drying, by spraying into a gas stream (e.g. spray-drying), wherein two different liquid products other than water or steam are sprayed simultaneously or separately, or wherein additives other than milk products or lactose are added separately in the spray-dried.

A23C 1/05

combined with agglomeration [N: granulation or coating]

Definition statement

This subclass/group covers:
Methods for concentration, evaporation or drying, by spraying into a gas stream (e.g. spray-drying), combined with agglomeration (granulation or coating).

A23C 1/06

Concentration by freezing out the water

Definition statement

This subclass/group covers:

Concentration by freezing out (and separating) the water.

A23C 1/08

Freeze-drying

Definition statement

This subclass/group covers:

Concentration by freeze-drying.

Synonyms and Keywords

In patent documents the following expressions/words "freeze-drying" and "lyophilisation" are often used as synonyms.

A23C 1/10

Foam drying (A23C1/04, A23C1/08 take precedence)

Definition statement

This subclass/group covers:

Foam drying.

References relevant to classification in this group

This subclass/group does not cover:

Spray-drying	A23C 1/04
Freeze-drying	A23C 1/08

A23C 1/12

Concentration by evaporation

Definition statement

This subclass/group covers:

Concentration by evaporation.

A23C 1/14

combined with other treatment (A23C3/00, A23C9/00 take precedence)

Definition statement

This subclass/group covers:

Methods for concentration, evaporation or drying combined with other treatment.

References relevant to classification in this group

This subclass/group does not cover:

Preservation of milk or milk preparations	A23C 3/00
Preparation of specific dairy products	A23C 9/00

A23C 1/16

using additives

Definition statement

This subclass/group covers:

Methods for concentration, evaporation or drying combined with other treatment, wherein additive are used.

A23C 3/00

Preservation of milk or milk preparations (of cream A23C13/08; of butter A23C15/18; of cheese A23C19/097)

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations.

References relevant to classification in this group

This subclass/group does not cover:

Preservation of cream	A23C 13/08
-----------------------	----------------------------

Preservation of butter	A23C 15/18
Preservation of cheese	A23C 19/097

Informative references

Attention is drawn to the following places, which may be of interest for search:

Preservation of foods in general	A23L 3/00
Preservation of non-alcoholic beverages	A23L 2/42

A23C 3/005

[N: Storing or packaging in a vacuum or in inert or sterile gaseous atmosphere (impregnation with inert gases A23C9/1524)]

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by storing in a vacuum (i.e. reduced pressure) or inert or sterile gaseous atmosphere.

References relevant to classification in this group

This subclass/group does not cover:

Impregnation with inert gases	A23C 9/1524
-------------------------------	-----------------------------

Informative references

Attention is drawn to the following places, which may be of interest for search:

Preservation of foods in general using a controlled atmosphere	A23L 3/3445
--	-----------------------------

A23C 3/02

by heating (A23C3/07 takes precedence)

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by heating.

References relevant to classification in this group

This subclass/group does not cover:

Preservation by irradiation or wave treatment	A23C 3/07
---	---------------------------

A23C 3/023

in packages

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by heating in packages or containers.

A23C 3/027

progressively transported through the apparatus

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by heating in packages or containers, which are progressively transported through the apparatus.

A23C 3/03

the materials being loose unpacked

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by heating the materials in a loose unpacked state.

A23C 3/031

[N: Apparatus through which the material is transported non progressively; Temperature-maintaining holding tanks or vats with discontinuous filling or discharge]

Definition statement

This subclass/group covers:

Apparatus adapted for preserving milk or milk preparations by heating the materials in a loose unpacked state, through which the material is transported non-progressively. Temperature-maintaining holding tanks or vats with discontinuous filling or discharge.

A23C 3/033

and progressively transported through the apparatus

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by heating the materials in a loose unpacked state, wherein said materials are progressively transported through the apparatus.

A23C 3/0332

[N: in contact with multiple heating plates]

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by heating the materials in a loose unpacked state, wherein said materials are progressively transported through the apparatus and maintained in contact with multiple heating plates (e.g. classical plate heat exchangers).

A23C 3/0335

[N: the milk being heated by electrical or mechanical means, e.g. by friction]

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by heating the materials in a loose unpacked state, wherein said materials are progressively transported through the apparatus and heated by electrical and/or mechanical means, e.g. by friction.

A23C 3/0337

[N: the milk flowing through with indirect heat exchange, containing rotating elements, e.g. for improving the heat exchange]

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by heating the materials in a loose unpacked state, wherein said materials progressively flow through an apparatus with indirect heat exchange, said apparatus containing rotating elements (e.g. for improving heat exchange).

A23C 3/037

in direct contact with the heating medium, e.g. steam

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by heating the materials in a loose unpacked state, wherein said materials are progressively transported through the apparatus and brought in direct contact with the heating medium, heating medium being gaseous e.g. steam or liquid but not a part of the apparatus like plates, pipes, jackets, etc.

A23C 3/0375

[N: by pulverisation of the milk, including free falling film]

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by heating the materials in a loose unpacked state, wherein the milk or milk preparation is progressively transported through the apparatus and brought in direct contact with the heating medium, e.g. steam, and wherein the milk or milk preparation is pulverised or converted into a free falling film.

A23C 3/04

by freezing or cooling

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by freezing or cooling.

A23C 3/045

[N: Freezing in loose unpacked form]

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by freezing in loose unpacked form.

A23C 3/05

in packages

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by freezing or cooling in packages.

A23C 3/055

[N: Freezing in packages]

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by freezing in packages.

A23C 3/07

by irradiation, e.g. by microwaves; [N: by sonic or ultrasonic waves]

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by irradiation (e.g. microwaves) or by sonic or ultrasonic waves.

Special rules of classification within this subgroup

Heating of milk by electromagnetic means should be classified in this group as

well.

A23C 3/073

[N: by sonic or ultrasonic waves]

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by sonic or ultrasonic waves.

A23C 3/076

[N: by ultraviolet or infrared radiation]

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by ultraviolet (UV) or infrared (IR) radiation.

A23C 3/08

by addition of preservatives (addition of micro-organisms or enzymes A23C9/12, of other substances A23C9/152)

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by addition of preservatives.

References relevant to classification in this group

This subclass/group does not cover:

Addition of antibiotics	A23C 9/1585
Addition of micro-organisms or enzymes	A23C 9/12
Addition of other substances (additives)	A23C 9/152

A23C 3/085

[N: Inorganic compounds, e.g. lactoperoxidase - H₂O₂ systems]

Definition statement

This subclass/group covers:

Methods and apparatus for preserving milk or milk preparations by addition of inorganic preservatives (e.g. lactoperoxidase - H₂O₂ systems).

A23C 7/00

Other dairy technology

Definition statement

This subclass/group covers:

Dairy technology not covered elsewhere.

References relevant to classification in this group

This subclass/group does not cover:

Apparatus for homogenising milk	A01J 11/16
---------------------------------	----------------------------

A23C 7/02

Chemical cleaning of dairy apparatus (cleaning in general B08B, e.g. B08B3/08); Use of sterilisation methods therefor (sterilisation methods per se A61L)

Definition statement

This subclass/group covers:

Methods and apparatus adapted for the chemical cleaning of dairy apparatus; use of sterilisation methods therefor.

References relevant to classification in this group

This subclass/group does not cover:

Cleaning in general	B08B , B08B 3/08
Sterilisation methods in general	A61L

A23C 7/04

Removing unwanted substances [N: other than lactose or milk proteins] from milk (by filtering A01J9/02, A01J11/06)

Definition statement

This subclass/group covers:

Methods and apparatus adapted for removing unwanted substances other than lactose or milk proteins from milk by methods other than filtration.

References relevant to classification in this group

This subclass/group does not cover:

Removing of unwanted substances from milk by filtration	A01J 9/02 , A01J 11/06
Preservation of milk or milk preparations	A23C 3/00

A23C 7/043

[N: using chemicals in liquid or solid state, e.g. flocculating, adsorbing or extracting agents (A23C9/146 and A23C9/148 take precedence)]

Definition statement

This subclass/group covers:

Methods and apparatus adapted for removing unwanted substances other than lactose or milk proteins from milk using chemicals in liquid or solid state, e.g. flocculating, adsorbing or extracting agents.

References relevant to classification in this group

This subclass/group does not cover:

Use of ion-exchange in the production of milk preparations	A23C 9/146
Use of molecular sieve or gel filtration in the production of milk preparations	A23C 9/148

A23C 7/046

[N: by centrifugation without using chemicals, e.g. bactofugation; re-use of bactofugate]

Definition statement

This subclass/group covers:

Methods and apparatus adapted for removing unwanted substances other than lactose or milk proteins from milk without using chemicals, e.g. bactofugation; re-use of bactofugate.

A23C 9/00

Milk preparations; Milk powder or milk powder preparations (A23C21/06 takes precedence; preservation A23C3/00; chocolate milk A23G1/00; ice-cream, mixtures for preparation of ice-cream A23G9/00; puddings, dry powder puddings A23L1/187)

Definition statement

This subclass/group covers:

Methods and apparatus for preparing milk preparations, milk powder and milk powder preparations.

Milk preparations, milk powder and milk powder preparations per se.

References relevant to classification in this group

This subclass/group does not cover:

Mixtures of whey with milk products or milk components	A23C 21/06
Preservation of milk and milk preparations	A23C 3/00
Chocolate milk	A23G 1/00
Ice-cream and mixtures for the preparation thereof	A23G 9/00
Puddings and dry powder puddings	A23L 1/187
Use of milk products or milk derivatives in the preparation of (salad) dressings	A23L 1/246

A23C 9/005

[N: Condensed milk; Sugared condensed milk (A23C1/06 and A23C1/12 take precedence)]

Definition statement

This subclass/group covers:

Condensed milk and sugared condensed milk as well as methods and apparatus adapted for their preparation.

References relevant to classification in this group

This subclass/group does not cover:

Concentration by freezing out water	A23C 1/06
Concentration by evaporation	A23C 1/12

A23C 9/12

Fermented milk preparations; Treatment using micro-organisms or enzymes (whey preparations A23C21/00)

Definition statement

This subclass/group covers:

Fermented milk preparations and/or treatment of milk using micro-organisms or enzymes.

References relevant to classification in this group

This subclass/group does not cover:

Cream preparations	A23C 13/00
Butter preparations	A23C 15/00
Buttermilk preparations	A23C 17/00
Cheese and cheese preparations	A23C 19/00
Whey preparations	A23C 21/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Processes using micro-organisms in general	C12R 1/00
Mutation or genetic engineering of micro-organisms in general	C12N 15/00
Enzymes in general	C12N 9/00
Propagation of micro-organisms in general	C12N 1/00

A23C 9/1203

[N: Addition of, or treatment with, enzymes or micro-organisms other than lactobacteriaceae]

Definition statement

This subclass/group covers:

Fermented milk preparations and treatment using micro-organisms or enzymes, wherein enzymes or micro-organisms other than lactobacteriaceae (i.e. lactic acid bacteria) are added and/or used for the treatment.

References relevant to classification in this group

This subclass/group does not cover:

Fermentation using lactobacteriaceae (i.e. lactic acid bacteria)	A23C 9/123
--	----------------------------

A23C 9/1206

[N: Lactose hydrolysing enzymes, e.g. lactase, beta-galactosidase]

Definition statement

This subclass/group covers:

Fermented milk preparations and treatment using enzymes, wherein a lactose hydrolysing enzyme (e.g. lactase, beta-galactosidase) is added and/or used for the treatment.

A23C 9/1209

[N: Proteolytic or milk coagulating enzymes, e.g. trypsin]

Definition statement

This subclass/group covers:

Fermented milk preparations and treatment using enzymes, wherein a proteolytic or milk coagulating enzyme (e.g. trypsin) is added and/or used for the treatment.

A23C 9/1213

[N: Oxidation or reduction enzymes, e.g. peroxidase, catalase, dehydrogenase]

Definition statement

This subclass/group covers:

Fermented milk preparations and treatment using enzymes, wherein an oxidation and/or reduction enzyme (oxidoreductase, e.g. peroxidase, catalase, dehydrogenase) is added and/or used for the treatment.

A23C 9/1216

[N: Other enzymes]

Definition statement

This subclass/group covers:

Fermented milk preparations and treatment using enzymes, wherein other enzymes than oxidoreductases, e.g. lipid acyltransferase, mutarotase are added and/or used for the treatment.

A23C 9/122

[N: Apparatus for preparing or treating fermented milk products]

Definition statement

This subclass/group covers:

Apparatus for preparing or treating fermented milk products.

A23C 9/1223

[N: for making stirred yoghurt; Apparatus with agitating or stirring means; Continuous bulk fermentation, heating or cooling, i.e. continuous inlet and outlet flow of yoghurt]

Definition statement

This subclass/group covers:

Apparatus for preparing stirred yoghurt and apparatus with agitating or stirring means.

Continuous bulk fermentation, heating or cooling, i.e. continuous inlet and outlet flow of yoghurt.

A23C 9/1226

[N: for making set yoghurt in containers without stirring, agitation or transport of the yoghurt or the containers during incubation, heating or cooling; Domestic yoghurt apparatus without agitating means]

Definition statement

This subclass/group covers:

Apparatus for preparing set yoghurt in containers without stirring, agitation or transport of the yoghurt or the containers during incubation, heating or cooling.

Domestic yoghurt apparatus without agitating means.

A23C 9/123

using only micro-organisms of the genus lactobacteriaceae; Yoghurt (A23C9/13 takes precedence)

Definition statement

This subclass/group covers:

Fermented milk preparations prepared using micro-organisms of the genus Lactobacteriaceae (i.e. lactic acid bacteria) only, for example yoghurt.

References relevant to classification in this group

This subclass/group does not cover:

Using additives for preparing fermented milk products	A23C 9/13
---	---------------------------

A23C 9/1232

[N: in powdered, granulated or dried solid form]

Definition statement

This subclass/group covers:

Powdered, granulated or dried solid fermented milk preparations prepared using micro-organisms of the genus Lactobacteriaceae (i.e. lactic acid bacteria) only.

A23C 9/1234

[N: characterised by using a Lactobacillus sp. other than Lactobacillus Bulgaricus, including Bifidobacterium sp.]

Definition statement

This subclass/group covers:

Fermented milk preparations prepared using micro-organisms of the genus Lactobacteriaceae (i.e. lactic acid bacteria) only, characterised by the use of Lactobacillus species other than bulgaricus, including Bifidobacterium species.

A23C 9/1236

[N: using Leuconostoc, Pediococcus or Streptococcus sp. other than Streptococcus Thermophilus; Artificial sour buttermilk in general (A23C9/1234 and A23C17/02 take precedence)]

Definition statement

This subclass/group covers:

Fermented milk preparations prepared with micro-organisms of the genus Lactobacteriaceae (i.e. lactic acid bacteria) only, using Leuconostoc, Pediococcus, or a Streptococcus species other than thermophilus.

Artificial sour buttermilk in general.

References relevant to classification in this group

This subclass/group does not cover:

Fermentation using Lactobacillus other than bulgaricus	A23C 9/1234
--	-----------------------------

Buttermilk treated with micro-organisms	A23C 17/02
---	----------------------------

A23C 9/1238

[N: using specific *L. bulgaricus* or *S. thermophilus* micro-organisms; using entrapped or encapsulated yoghurt bacteria; Physical or chemical treatment of *L. bulgaricus* or *S. thermophilus* cultures; Fermentation only with *L. bulgaricus* or only with *S. thermophilus*]

Definition statement

This subclass/group covers:

Fermented milk preparations prepared with micro-organisms of the genus Lactobacteriaceae (i.e. lactic acid bacteria) only, using specific *L. bulgaricus* and/or *S. thermophilus* strains, or using entrapped or encapsulated yoghurt bacteria.

Physical and/or chemical treatment of *L. bulgaricus* and/or *S. thermophilus* cultures.

Fermentation only with *L. bulgaricus* or only with *S. thermophilus*.

A23C 9/127

using micro-organisms of the genus lactobacteriaceae and other micro-organisms or enzymes e.g. kefir, koumiss (A23C9/13 takes precedence)

Definition statement

This subclass/group covers:

Fermented milk preparations prepared using micro-organisms of the genus Lactobacteriaceae (i.e. lactic acid bacteria) and other micro-organisms or enzymes. Examples of fermented milk preparations : kefir, koumiss.

References relevant to classification in this group

This subclass/group does not cover:

Using additives for preparing fermented milk products	A23C 9/13
---	---------------------------

A23C 9/1275

[N: using only lactobacteriaceae for fermentation in combination with enzyme treatment of the milk product; using enzyme treated milk products for fermentation with lactobacteriaceae]

Definition statement

This subclass/group covers:

Fermented milk preparations prepared using only micro-organisms of the genus Lactobacteriaceae (i.e. lactic acid bacteria) for fermentation, combined with enzyme treatment of the milk product.

Using enzyme treated milk products (as starting materials) for fermentation with Lactobacteriaceae.

A23C 9/13

using additives

Definition statement

This subclass/group covers:

Fermented milk preparations and treatment using micro-organisms or enzymes, wherein additives, e.g. flavours, dyes, inorganic compounds, fruits are used.

A23C 9/1307

[N: Milk products or derivatives; Fruit or vegetable juices; Sugars, sugar alcohols, sweeteners; Oligosaccharides; Organic acids or salts thereof or acidifying agents; Flavours, dyes or pigments; Inert or aerosol gases; Carbonation methods]

Definition statement

This subclass/group covers:

Fermented milk preparations and treatment using micro-organisms or enzymes, wherein

- milk products or milk derivatives
- fruit or vegetable juice
- sugars, sugar alcohols or sweeteners

- oligosaccharides
- organic acids or salts thereof, or acidifying agents
- flavours, dyes or pigments, and/or
- inert or aerosol gases are used as additive.

Carbonation methods.

A23C 9/1315

[N: Non-milk proteins or fats; Seeds, pulses, cereals or soja; Fatty acids, phospholipids, mono- or diglycerides or derivatives therefrom; Egg products]

Definition statement

This subclass/group covers:

Fermented milk preparations and treatment using micro-organisms or enzymes, wherein

- non-milk proteins or fats
- seeds, pulses, cereals or soja
- fatty acids, phospholipids, mono- or diglycerides, or derivatives thereof and/or
- egg products

are used as additive.

A23C 9/1322

[N: Inorganic compounds; Minerals, including organic salts thereof, oligo-elements; Amino-acids, peptides, protein-hydrolysates or derivatives; Nucleic acids or derivatives; Yeast extract or autolysate; Vitamins; Antibiotics; Bacteriocins]

Definition statement

This subclass/group covers:

Fermented milk preparations and treatment using micro-organisms or enzymes, wherein

- inorganic compounds

- minerals, including organic salts thereof, or oligoelements
- amino acids, peptides, protein hydrolysates, or derivatives thereof
- nucleic acids or derivatives thereof
- yeast extract or autolysate
- vitamins or derivatives thereof
- antibiotics or bacteriocins

are used as additive.

A23C 9/133

Fruit or vegetables

Definition statement

This subclass/group covers:

Fermented milk preparations and treatment using micro-organisms or enzymes, wherein fruit or vegetables (including processed products thereof, such as pulp, juice etc) are used as additive.

A23C 9/137

Thickening substances

Definition statement

This subclass/group covers:

Fermented milk preparations and treatment using micro-organisms or enzymes, wherein thickening substances are used as additive.

A23C 9/14

in which the chemical composition of the milk is modified by non-chemical treatment

Definition statement

This subclass/group covers:

Methods for preparing milk preparations, milk powder and milk powder preparations by modifying the chemical composition of the milk (or milk derived material) using non-chemical treatment.

Relationship between large subject matter areas

Subject-matter of general interest relating to chromatography can be found and should be classified in [B01D 15/08](#).

References relevant to classification in this group

This subclass/group does not cover:

Appliances for aerating or de-aerating milk	A01J 11/04
Milk centrifuges	B04B

Informative references

Attention is drawn to the following places, which may be of interest for search:

Chromatography in general	B01D 15/08
---------------------------	----------------------------

A23C 9/142

by dialysis, reverse osmosis or ultrafiltration (A23C9/144 takes precedence)

Definition statement

This subclass/group covers:

Methods for preparing milk preparations, milk powder and milk powder preparations by modifying the chemical composition of the milk (or milk derived material) using dialysis, reverse osmosis (RO), microfiltration (MF), ultrafiltration (UF), nanofiltration (NF) and/or similar techniques.

References relevant to classification in this group

This subclass/group does not cover:

Use of electrical means, e.g. electrodialysis (ED)	A23C 9/144
--	----------------------------

A23C 9/1422

[N: by ultrafiltration, microfiltration or diafiltration of milk, e.g. for separating protein and lactose; Treatment of the UF permeate]

Definition statement

This subclass/group covers:

Methods for preparing milk preparations, milk powder and milk powder preparations by modifying the chemical composition of milk using microfiltration (MF), ultrafiltration (UF), nanofiltration (NF) and/or diafiltration, e.g. for separating protein and lactose.

Treatment of the MF/UF/NF permeate obtained thereby.

A23C 9/1425

[N: by ultrafiltration, microfiltration or diafiltration of whey, e.g. treatment of the UF permeate]

Definition statement

This subclass/group covers:

Methods for preparing milk preparations, milk powder and milk powder preparations by modifying the chemical composition of whey using microfiltration (MF), ultrafiltration (UF), nanofiltration (NF) and/or diafiltration, e.g. for separating protein and lactose.

Treatment of the MF/UF/NF permeate obtained thereby.

A23C 9/1427

[N: by dialysis, reverse osmosis or hyperfiltration, e.g. for concentrating or desalting]

Definition statement

This subclass/group covers:

Methods for preparing milk preparations, milk powder and milk powder preparations by modifying the chemical composition of the milk (or milk derived material) using dialysis, reverse osmosis (RO) or hyperfiltration, e.g. for concentrating or desalting.

A23C 9/144

by electrical means, e.g. electro dialysis

Definition statement

This subclass/group covers:

Methods for preparing milk preparations, milk powder and milk powder preparations by modifying the chemical composition of the milk (or milk derived material) using electrical means, e.g. electro dialysis (ED).

A23C 9/146

by ion-exchange

Definition statement

This subclass/group covers:

Methods for preparing milk preparations, milk powder and milk powder preparations by modifying the chemical composition of the milk (or milk derived material) using ion-exchange.

A23C 9/1465

[N: Chromatographic separation of protein or lactose fraction;
Adsorption of protein or lactose fraction followed by elution]

Definition statement

This subclass/group covers:

Methods for preparing milk preparations, milk powder and milk powder preparations by modifying the chemical composition of the milk (or milk derived material) using ion-exchange for the chromatographic separation of protein or lactose fractions, or for the adsorption of protein or lactose fractions followed by elution.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Chromatography in general	B01D 15/08
---------------------------	----------------------------

A23C 9/148

by molecular sieve or gel filtration [N: or chromatographic treatment (A23C9/1465 takes precedence)]

Definition statement

This subclass/group covers:

Methods for preparing milk preparations, milk powder and milk powder preparations by modifying the chemical composition of the milk (or milk derived material) using molecular sieve or gel filtration.

References relevant to classification in this group

This subclass/group does not cover:

Ion exchange chromatographic treatment	A23C 9/1465
--	-----------------------------

A23C 9/15

Reconstituted or recombined milk products containing neither non-milk fat nor non-milk proteins (containing thickening substances A23C9/154; mixtures of whey, with milk products or milk components A23C21/06)

Definition statement

This subclass/group covers:

Reconstituted or recombined milk preparations, milk powder and milk powder preparations containing neither non-milk fat nor non-milk proteins, and corresponding methods.

References relevant to classification in this group

This subclass/group does not cover:

Using thickening agents as additive	A23C 9/154
Whey based products containing milk products or milk components	A23C 21/06

A23C 9/1504

[N: Spreads, semi-solid products]

Definition statement

This subclass/group covers:

Spreads and semi-solid milk products containing neither non-milk fat nor non-milk proteins, obtained by reconstitution or recombination, and corresponding methods.

References relevant to classification in this group

This subclass/group does not cover:

Cultured butter based spreads	A23C 15/165
-------------------------------	-----------------------------

A23C 9/1508

[N: Dissolving or reconstituting milk powder; Reconstitution of milk concentrate with water; Standardisation of fat content of milk]

Definition statement

This subclass/group covers:

Reconstituted or recombined milk preparations, milk powder and milk powder preparations containing neither non-milk fat nor non-milk proteins, prepared by

- dissolving or reconstituting milk powder
- reconstitution of milk concentrate with water, and/or
- standardisation of the fat content of milk,

and methods therefor.

A23C 9/1512

[N: containing isolated milk or whey proteins, caseinates or cheese; Enrichment of milk products with milk proteins in isolated or concentrated form, e.g. ultrafiltration retentate]

Definition statement

This subclass/group covers:

Reconstituted or recombined milk preparations, milk powder and milk powder preparations containing isolated milk or whey proteins, caseinates or cheese but no non-milk fat nor non-milk proteins.

Enrichment of milk products containing neither non-milk fat nor non-milk proteins with milk proteins in isolated or concentrated form (e.g. UF retentate).

A23C 9/1516

[N: Enrichment or recombination of milk (excepted whey) with milk fat, cream or butter without using isolated or concentrated milk proteins]

Definition statement

This subclass/group covers:

Enrichment or recombination of milk (whey being excepted) with milk fat, cream or butter without using isolated or concentrated milk proteins.

A23C 9/152

containing additives (fermented milk preparations containing additives A23C9/13)

Definition statement

This subclass/group covers:

Milk preparations, milk powder and milk powder preparations containing additives, and methods for their preparation.

References relevant to classification in this group

This subclass/group does not cover:

Fermented milk preparations containing additives	A23C 9/13
Milk preparations treated with enzymes and/or microorganisms containing additives	A23C 9/13

A23C 9/1522

[N: Inorganic additives, e.g. minerals, trace elements; Chlorination or fluoridation of milk; Organic salts or complexes of metals other than natrium or kalium; Calcium enrichment of milk]

Definition statement

This subclass/group covers:

Milk preparations, milk powder and milk powder preparations containing inorganic additives (e.g. minerals, trace elements), organic salts, or complexes of metals other than sodium and potassium, and methods for their preparation.

Chlorination, fluoridation, and calcium enrichment of milk.

A23C 9/1524

[N: Inert gases, noble gases, oxygen, aerosol gases; Processes for foaming]

Definition statement

This subclass/group covers:

Milk preparations, milk powder and milk powder preparations containing inert gases, noble gases, oxygen or aerosol gases, and methods for their preparation.

Processes for foaming.

A23C 9/1526

[N: Amino acids; Peptides; Protein hydrolysates; Nucleic acids; Derivatives thereof]

Definition statement

This subclass/group covers:

Milk preparations, milk powder and milk powder preparations containing amino acids, peptides, protein hydrolysates, nucleic acids, or derivatives thereof, and methods for their preparation.

A23C 9/1528

[N: Fatty acids; Mono- or diglycerides; Vaseline; Paraffine; Phospholipids; Derivatives thereof]

Definition statement

This subclass/group covers:

Milk preparations, milk powder and milk powder preparations containing fatty acids, mono- or diglycerides, vaseline, paraffine, phospholipids, or derivatives thereof, and methods for their preparation.

Special rules of classification within this group

Only emulsifiers containing fatty acid residues, mono- or diglycerides, phospholipids, and compounds derived from these compounds are classified in this group.

A23C 9/154

containing thickening substances, eggs or cereal preparations; Milk gels

Definition statement

This subclass/group covers:

Milk preparations, milk powder and milk powder preparations containing thickening substances, eggs or cereal preparations as well as milk gels, and methods for their preparation.

A23C 9/1542

[N: Acidified milk products containing thickening agents or acidified milk gels, e.g. acidified by fruit juices (fermentation A23C9/12)]

Definition statement

This subclass/group covers:

Acidified milk preparations containing thickening substances as well as acidified milk gels (e.g. acidified by fruit juices), and methods for their preparation.

References relevant to classification in this group

This subclass/group does not cover:

Acidification by lactic acid fermentation	A23C 9/12
---	---------------------------

A23C 9/1544

[N: Non-acidified gels, e.g. custards, creams, desserts, puddings, shakes or foams, containing eggs or thickening or gelling agents other than sugar; Milk products containing natural or microbial polysaccharides, e.g. cellulose or cellulose derivatives; Milk products containing nutrient fibres]

Definition statement

This subclass/group covers:

Non-acidified gels, e.g. custards, creams, desserts, dairy puddings, shakes or foams, containing eggs or thickening or gelling agents other than sugar, and methods for their preparation.

Milk products containing natural or microbial polysaccharides (e.g. cellulose or cellulose derivatives, and methods for their preparation.

Milk products containing nutrient fibres, and methods for their preparation.

A23C 9/1546

[N: in powdered, granulated or dried solid form]

Definition statement

This subclass/group covers:

Powdered, granulated or dried solid

- non-acidified gels, e.g. custards, creams, desserts, dairy puddings, shakes or foams, containing eggs or thickening or gelling agents other than sugar
- milk products containing natural or microbial polysaccharides (e.g. cellulose or cellulose derivatives)
- milk products containing nutrient fibres,

and methods for their preparation.

A23C 9/1548

[N: Non-dried milk gels, creams or semi-solid products obtained by heating milk with a sugar without using gums, e.g. milk jam]

Definition statement

This subclass/group covers:

Non-dried milk gels, creams or semi-solid products obtained by heating milk with a sugar without using gums, e.g. milk jam, and methods for their preparation.

A23C 9/156

Flavoured milk preparations; [N: Addition of fruits, vegetables, sugars, sugar alcohols, sweeteners] (A23C9/154 takes precedence)

Definition statement

This subclass/group covers:

Flavoured milk preparations and methods for their preparation, in particular addition of fruits, vegetables, sugars, sugar alcohols and/or sweeteners.

References relevant to classification in this group

This subclass/group does not cover:

Milk preparations containing thickeners and milk gels	A23C 9/154
---	----------------------------

A23C 9/1565

[N: Acidified milk products, e.g. milk flavoured with fruit juices (A23C9/1542 takes precedence; fermentation A23C9/12)]

Definition statement

This subclass/group covers:

Acidified flavoured milk preparations (e.g. milk flavoured with fruit juice) and methods for their preparation.

References relevant to classification in this group

This subclass/group does not cover:

Acidified milk preparations containing thickeners and acidified milk gels	A23C 9/1542
Acidification by lactic acid fermentation	A23C 9/12

A23C 9/158

containing vitamins or antibiotics

Definition statement

This subclass/group covers:

Milk preparations, milk powder and milk powder preparations containing vitamins, antibiotics or bacteriocins, and methods for their preparation.

A23C 9/1585

[N: Antibiotics; Bacteriocins; Fungicides from micro-organisms]

Definition statement

This subclass/group covers:

Milk preparations, milk powder and milk powder preparations containing antibiotics, bacteriocins or micro-organism derived fungicides, and methods for their preparation.

A23C 9/16

Agglomerating or granulating milk powder; Making instant

milk powder; Products obtained thereby (A23C1/05, A23C9/18 take precedence)

Definition statement

This subclass/group covers:

Methods and apparatus for agglomerating or granulating milk powder and for making instant milk powder, as well as the respective products.

References relevant to classification in this group

This subclass/group does not cover:

Spray-drying combined with agglomeration, granulation or coating	A23C 1/05
Milk in dried and compressed or semi-solid form	A23C 9/18

A23C 9/18

Milk in dried and compressed or semi-solid form

Definition statement

This subclass/group covers:

Milk in dried and compressed or semi-solid form, and methods for its preparation.

A23C 9/20

Dietetic milk products not covered by groups A23C9/12 to A23C9/18

Definition statement

This subclass/group covers:

Dietetic milk products not covered by groups [A23C 9/12](#) to [A23C 9/18](#).

A23C 9/203

[N: containing bifidus-active substances, e.g. lactulose; containing oligosaccharides]

Definition statement

This subclass/group covers:

Dietetic milk products containing bifidus-active substances (e.g. lactulose) or oligosaccharides (e.g. inulin).

A23C 9/206

[N: Colostrum; Human milk]

Definition statement

This subclass/group covers:

Milk products based on colostrum or human milk.

A23C 11/00

Milk substitutes, e.g. coffee whitener compositions (cheese substitutes A23C20/00; butter substitutes A23D; cream substitutes A23L1/19)

Definition statement

This subclass/group covers:

Milk substitute products, e.g. coffee whiteners, and method for their preparation.

References relevant to classification in this group

This subclass/group does not cover:

Cheese substitutes	A23C 20/00
Butter substitutes	A23D
Cream substitutes	A23L 1/19

A23C 11/02

containing at least one non-milk component as source of fats or proteins (A23C19/055, A23C21/04 take precedence)

Definition statement

This subclass/group covers:

Milk substitute products, e.g. coffee whiteners, containing at least one non-milk component as source of fats or proteins, and methods for their

preparation.

References relevant to classification in this group

This subclass/group does not cover:

Use of non-milk fats or proteins for making cheese curd	A23C 19/055
Use of non-milk fats or proteins as ingredients in whey preparations	A23C 21/04

A23C 11/04

containing non-milk fats but no non-milk proteins (A23C11/08, A23C11/10 take precedence)

Definition statement

This subclass/group covers:

Milk substitute products, e.g. coffee whiteners, containing non-milk fats but no non-milk proteins, and method for their preparation.

References relevant to classification in this group

This subclass/group does not cover:

Milk substitutes containing caseinates but no other milk proteins nor milk fats	A23C 11/08
Milk substitutes containing or not lactose, but no milk components as sources of fats, carbohydrates or proteins	A23C 11/10

A23C 11/045

[N: obtained by mixing the non-fat components in powdered form with the fats or by dry mixing of the components]

Definition statement

This subclass/group covers:

Milk substitute products containing non-milk fats but no non-milk proteins,

obtained by mixing the non-fat components in powdered form with the fats, or by dry mixing of the components, and methods for their preparation.

A23C 11/06

containing non-milk proteins (A23C11/08, A23C11/10 take precedence)

Definition statement

This subclass/group covers:

Milk substitute products containing non-milk proteins, and methods for their preparation.

References relevant to classification in this group

This subclass/group does not cover:

Milk substitutes containing caseinates but no other milk proteins nor milk fats	A23C 11/08
Milk substitutes containing or not lactose, but no milk components as sources of fats, carbohydrates or proteins	A23C 11/10

A23C 11/065

[N: Microbial proteins, inactivated yeast or animal proteins]

Definition statement

This subclass/group covers:

Milk substitute products containing microbial proteins, inactivated yeast or animal proteins as non-milk proteins, and methods for their preparation.

A23C 11/08

containing caseinates but no other milk proteins nor milk fats

Definition statement

This subclass/group covers:

Milk substitute products containing caseinates but no other milk proteins nor milk fats, and methods for their preparation.

A23C 11/10

containing or not lactose but no other milk components as source of fats, carbohydrates or proteins, e.g. soy milk

Definition statement

This subclass/group covers:

Milk substitutes containing lactose or not and no other milk components as sources of fats, carbohydrates or proteins, and methods for their preparation.

A23C 11/103

[N: containing only proteins from pulses, oilseeds or nuts, e.g. soy or nut milk]

Definition statement

This subclass/group covers:

Milk substitutes containing lactose or not, but no other milk components as sources of fats, carbohydrates or proteins, which contain proteins only from pulses, oilseeds or nuts, e.g. soy milk or almond milk, and methods for their preparation.

A23C 11/106

[N: Addition of, or treatment with, micro-organisms (A23C20/025 and A23L1/2118 take precedence)]

Definition statement

This subclass/group covers:

Milk substitutes containing lactose or not, but no other milk components as sources of fats, carbohydrates or proteins, which contain proteins only from pulses, oilseeds or nuts, which are treated with micro-organisms or to which micro-organisms are added, and methods for their preparation.

References relevant to classification in this group

This subclass/group does not cover:

Whey or whey preparation obtained by treatment with lactase	A23C 21/023
Foods obtained by removing butter or other undesirable substances from pulses, legumes or oilseeds using micro-organisms	A23L 1/2118

Informative references

Attention is drawn to the following places, which may be of interest for search:

Fermented milk preparations and/or treatment of milk using micro-organisms or enzymes	A23C 9/12
Processes using micro-organisms in general	C12R 1/00
Mutation or genetic engineering of micro-organisms in general	C12N 15/00
Enzymes in general	C12N 9/00
Propagation of micro-organisms in general	C12N 1/00

A23C 13/00

Cream; Cream preparations; Making thereof (coffee whitener compositions A23C11/00; cream substitutes A23L1/19)

Definition statement

This subclass/group covers:

Cream, cream preparations and methods for their preparation.

References relevant to classification in this group

This subclass/group does not cover:

Dessert type creams obtained by adding thickening agents, eggs or cereal preparations to milk	A23C 9/1544
Coffee whiteners	A23C 11/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Cream substitutes	A23L 1/19
Tanks for treating cream	A01J 13/00

A23C 13/08

Preservation

Definition statement

This subclass/group covers:

Preservation of cream and cream preparations.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Preservation of milk and milk preparations	A23C 3/00
--	---------------------------

A23C 13/085

[N: Freezing; Subsequent melting]

Definition statement

This subclass/group covers:

Preservation of cream and cream preparations by freezing, and melting subsequent to freezing.

A23C 13/10

by addition of preservatives (A23C13/14, A23C13/16 take precedence)

Definition statement

This subclass/group covers:

Preservation of cream and cream preparations by addition of preservatives.

References relevant to classification in this group

This subclass/group does not cover:

Cream preparations containing milk products or non-fat milk components	A23C 13/14
Cream preparations containing, or treated with, micro-organisms, enzymes or antibiotics, and sour cream	A23C 13/16

A23C 13/12

Cream preparations (ice-cream A23G9/00)

Definition statement

This subclass/group covers:

Cream preparations (other than ice cream) and methods for their preparation.

References relevant to classification in this group

This subclass/group does not cover:

Ice cream	A23G 9/00
-----------	---------------------------

A23C 13/125

[N: in powdered, granulated or solid form]

Definition statement

This subclass/group covers:

Cream preparations (other than ice cream) in powdered, granulated or solid form, and methods for their preparation.

A23C 13/14

containing milk products or [N: non-fat] milk components

Definition statement

This subclass/group covers:

Cream preparations (other than ice cream) containing milk products or non-fat milk components, and methods for their preparation.

A23C 13/16

containing, or treated with, micro-organisms, enzymes, or antibiotics; Sour cream

Definition statement

This subclass/group covers:

Cream preparations (other than ice cream) containing, or treated with, micro-organisms, enzymes or antibiotics. Sour cream and methods for the preparation thereof.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Fermented milk preparations and/or treatment of milk using micro-organisms or enzymes	A23C 9/12
Processes using micro-organisms in general	C12R 1/00
Mutation or genetic engineering of micro-organisms in general	C12N 15/00
Enzymes in general	C12N 9/00
Propagation of micro-organisms in general	C12N 1/00

A23C 13/165

[N: Making sour cream by chemical or physical means only]

Definition statement

This subclass/group covers:

Preparation of sour cream by chemical or physical means only.

A23C 15/00

Butter; Butter preparations; Making thereof (butter substitutes A23D)

Definition statement

This subclass/group covers:

Butter, methods for preparing butter, butter preparations (comprising butter as main component) and methods for preparing butter preparations.

References relevant to classification in this group

This subclass/group does not cover:

Apparatus for manufacturing butter	A01J 15/00
Butter substitutes	A23D

Informative references

Attention is drawn to the following places, which may be of interest for search:

Apparatus for manufacturing butter	A01J 15/00
Kneading machines for butter, or the like	A01J 17/00
Hand devices for forming slabs of butter, or the like	A01J 19/00
Machines for forming slabs of butter, or the like	A01J 21/00
Devices for dividing bulk butter, or the like	A01J 25/00

A23C 15/02

Making thereof

Definition statement

This subclass/group covers:

Methods for making butter and butter preparations.

A23C 15/04

from butter oil or anhydrous butter

Definition statement

This subclass/group covers:

Methods for making butter and butter preparations from butter oil or anhydrous butter.

A23C 15/06

Treating cream [N: or milk] prior to phase inversion

Definition statement

This subclass/group covers:

Methods for preparing butter and butter preparations, wherein cream (or milk) is treated prior to phase inversion.

A23C 15/065

[N: Addition of or treatment with micro-organisms or enzymes; Addition of cultured milk products]

Definition statement

This subclass/group covers:

Methods for preparing butter and butter preparations, wherein, prior to phase inversion, cream (or milk) is treated with micro-organisms or enzymes, or wherein, prior to phase inversion, micro-organisms, enzymes or cultured milk products are added thereto.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Fermented milk preparations and/or treatment of milk using micro-organisms or enzymes	A23C 9/12
Processes using micro-organisms in general	C12R 1/00
Mutation or genetic engineering of micro-organisms in general	C12N 15/00
Enzymes in general	C12N 9/00
Propagation of micro-organisms in general	C12N 1/00

A23C 15/12

Butter preparations

Definition statement

This subclass/group covers:

Butter preparations, i.e. dairy type food products based on butter comprising butter as main ingredient, and method for their manufacture.

References relevant to classification in this group

This subclass/group does not cover:

Use of milk products or milk derivatives in the preparation of (salad) dressings	A23L 1/246
Sauces	A23L 1/39

A23C 15/123

[N: Addition of micro-organisms or cultured milk products; Addition of enzymes; Addition of starter cultures other than distillates]

Definition statement

This subclass/group covers:

Methods for making butter preparations (i.e. dairy type food products based on butter comprising butter as main ingredient) wherein micro-organisms, cultured milk products, enzymes or starter cultures other than distillates are added, and butter preparations obtained thereby.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Fermented milk preparations and/or treatment of milk using micro-organisms or enzymes	A23C 9/12
Processes using micro-organisms in general	C12R 1/00
Mutation or genetic engineering of	C12N 15/00

micro-organisms in general	
Enzymes in general	C12N 9/00
Propagation of micro-organisms in general	C12N 1/00

A23C 15/126

[N: Butter containing a minority of vegetable oils; Enrichment of butter with fatty acids]

Definition statement

This subclass/group covers:

Methods for making butter preparations (i.e. dairy type food products based on butter comprising butter as main ingredient) containing a minority of vegetable oils, and enrichment of butter with fatty acids, as well as butter preparations obtained thereby.

A23C 15/14

Butter powder; Butter oil, i.e. melted butter, e.g. ghee; [N: Anhydrous butter]

Definition statement

This subclass/group covers:

Butter powder, butter oil (i.e. melted butter, e.g. ghee), anhydrous butter, and methods for the preparation thereof.

A23C 15/145

[N: Removal of steroids, e.g. cholesterol or free acids; Fractionation of anhydrous milkfat by extraction with solvents other than solvent crystallisation or with supercritical gases or by distillation]

Definition statement

This subclass/group covers:

Methods for preparing butter powder, butter oil (i.e. melted butter, e.g. ghee) and anhydrous butter, wherein steroids (e.g. cholesterol) or free fatty acids are removed, or wherein anhydrous milkfat is fractionated by extraction with solvents other than solvent crystallisation, with supercritical gases, or by

distillation, and butter powder, butter oil (i.e. melted butter, e.g. ghee) and anhydrous butter thus prepared.

A23C 15/16

Butter having reduced fat content

Definition statement

This subclass/group covers:

Methods for preparing butter having a reduced fat content and butter thus prepared.

A23C 15/165

[N: prepared by addition of microorganisms; Cultured spreads]

Definition statement

This subclass/group covers:

Butter having a reduced fat content obtained by addition of microorganisms, including cultured spreads.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Dairy spreads not based on butter	A23C 9/1504
Fermented milk preparations and/or treatment of milk using micro-organisms or enzymes	A23C 9/12
Processes using micro-organisms in general	C12R 1/00
Mutation or genetic engineering of micro-organisms in general	C12N 15/00
Propagation of micro-organisms in general	C12N 1/00

Glossary of terms

In this subclass/group, the following terms (or expressions) are used with the

meaning indicated:

Cultured spread	This group only relates to butter based cultured spreads.
-----------------	---

A23C 15/18

Preservation

Definition statement

This subclass/group covers:

Preservation of butter and butter preparations.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Preservation of milk and milk preparations	A23C 3/00
Preservation of foods in general	A23L 3/00

A23C 15/20

by addition of preservatives [N: or antioxidants]

Definition statement

This subclass/group covers:

Preservation of butter and butter preparations using preserving agents or antioxidants.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Preservation of foods in general with preserving chemicals	A23L 3/34
--	---------------------------

A23C 17/00

Buttermilk; Buttermilk preparations (A23C9/14 takes

precedence; preservation A23C3/00)

Definition statement

This subclass/group covers:

Buttermilk and buttermilk preparations and methods for their preparation.

References relevant to classification in this group

This subclass/group does not cover:

Methods wherein the chemical composition of the milk is modified by non-chemical treatment (e.g. ultrafiltration)	A23C 9/14
Preservations	A23C 3/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Preparation of butter	A23C 15/00
-----------------------	----------------------------

A23C 17/02

containing, or treated with, micro-organisms or enzymes

Definition statement

This subclass/group covers:

Buttermilk and buttermilk preparations containing, or treated with, micro-organisms or enzymes, and methods for their preparation.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Fermented milk preparations and/or treatment of milk using micro-organisms or enzymes	A23C 9/12
Processes using micro-organisms in general	C12R 1/00

Mutation or genetic engineering of micro-organisms in general	C12N 15/00
Enzymes in general	C12N 9/00
Propagation of micro-organisms in general	C12N 1/00

A23C 19/00

Cheese; Cheese preparations; Making thereof (cheese substitutes A23C20/00; casein A23J1/20)

Definition statement

This subclass/group covers:

Cheese and cheese substitutes and methods for their manufacture.

References relevant to classification in this group

This subclass/group does not cover:

Apparatus for use in cheese-making	A01J 25/00
Cheese substitutes	A23C 20/00
Milk derived casein per se and methods for obtaining milk derived casein	A23J 1/20

Informative references

Attention is drawn to the following places, which may be of interest for search:

Fermented milk preparations and/or treatment of milk using micro-organisms or enzymes	A23C 9/12
Processes using micro-organisms in general	C12R 1/00
Mutation or genetic engineering of micro-organisms in general	C12N 15/00

Enzymes in general	C12N 9/00
Propagation of micro-organisms in general	C12N 1/00

A23C 19/02

Making cheese curd

Definition statement

This subclass/group covers:

Methods for preparing cheese curd (i.e. coagulated / clotted milk).

References relevant to classification in this group

This subclass/group does not cover:

Apparatus for making cheese curd	A01J 25/00
----------------------------------	----------------------------

Informative references

Attention is drawn to the following places, which may be of interest for search:

Preparation of milk derived casein	A23J 1/202
------------------------------------	----------------------------

Glossary of terms

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

Curd formation	Curdling, clotting, coagulation of milk Casein precipitation
----------------	---

A23C 19/024

using continuous procedure

Definition statement

This subclass/group covers:

Methods for preparing cheese curd using a continuous procedure.

A23C 19/0245

[N: with immobilized enzymes or micro-organisms]

Definition statement

This subclass/group covers:

Methods for preparing cheese curd using a continuous procedure combined with immobilised enzymes or micro-organisms.

A23C 19/028

without substantial whey separation from coagulated milk

Definition statement

This subclass/group covers:

Methods for preparing cheese curd wherein whey separation is completely avoided; processes wherein whey separation is avoided to a significant extent or where at least less whey is separated than in standard processes

A23C 19/0285

[N: by dialysis or ultrafiltration]

Definition statement

This subclass/group covers:

Methods for preparing cheese curd without separation of substantial amounts of whey from the coagulated milk, wherein dialysis or ultrafiltration is applied.

A23C 19/032

characterised by the use of specific micro-organisms, or enzymes of microbial origin

Definition statement

This subclass/group covers:

Methods for preparing cheese curd wherein specific micro-organisms, or enzymes of microbial origin are used.

A23C 19/0321

[N: Propionic acid bacteria]

Definition statement

This subclass/group covers:

Methods for preparing cheese curd wherein propionic acid bacteria / Propionibacteria are used.

A23C 19/0323

[N: using only lactic acid bacteria, e.g. *Pediococcus* and *Leuconostoc* species; Bifidobacteria; Microbial starters in general (using moulds A23C19/0682)]

Definition statement

This subclass/group covers:

Methods for preparing cheese curd wherein only lactic acid bacterial (including *Pediococcus*, *Leuconostoc*, and Bifidobacteria) are used.

Use of microbial starters in general for making cheese curd.

References relevant to classification in this group

This subclass/group does not cover:

Use of moulds for cheesemaking	A23C 19/0682
--------------------------------	------------------------------

A23C 19/0325

[N: using yeasts, alone or in combination with lactic acid bacteria or with fungi, without using other bacteria]

Definition statement

This subclass/group covers:

Methods for preparing cheese curd wherein yeasts are used, either alone or in combination with lactic acid bacteria or with fungi, without using other (i.e. non-lactic acid) bacteria.

A23C 19/0326

[N: Rennet produced by fermentation e.g. microbial rennet; Rennet produced by genetic engineering]

Definition statement

This subclass/group covers:

Methods for preparing cheese curd wherein rennet produced by fermentation (e.g. microbial rennet) or by genetic engineering is used.

A23C 19/0328

[N: Enzymes other than milk clotting enzymes, e.g. lipase, beta-galactosidase]

Definition statement

This subclass/group covers:

Methods for preparing cheese curd wherein enzymes other than milk-clotting enzymes are used (e.g. lipase and beta-galactosidase).

A23C 19/04

characterised by the use of specific enzymes of vegetable or animal origin (A23C19/032 takes precedence)

Definition statement

This subclass/group covers:

Methods for preparing cheese curd wherein enzymes of plant, vegetable or animal origin are used.

References relevant to classification in this group

This subclass/group does not cover:

Preparation of cheese curd using microbial enzymes	A23C 19/032
--	-----------------------------

A23C 19/041

[N: Proteolytic or milk clotting enzymes from plants or vegetables, e.g. papain, ficin, bromelain]

Definition statement

This subclass/group covers:

Methods for preparing cheese curd wherein proteolytic or milk clotting enzymes from plants or vegetables are used (e.g. papain, ficin, bromelain).

A23C 19/043

[N: Enzymes other than proteolytic enzymes or milk clotting enzymes, e.g. lipase, lysosyme]

Definition statement

This subclass/group covers:

Methods for preparing cheese curd wherein enzymes of plant/vegetable/animal origin other than proteolytic or milk clotting are used (e.g. lipase, lysozyme).

A23C 19/045

Coagulation of milk without rennet or rennet substitutes [N: followed by whey separation]

Definition statement

This subclass/group covers:

Methods for preparing cheese curd by coagulation of milk without rennet or rennet substitutes, which is followed by whey separation.

A23C 19/0455

[N: Coagulation by direct acidification without fermentation of the milk, e.g. by chemical or physical means]

Definition statement

This subclass/group covers:

Methods for preparing cheese curd by coagulation of milk without rennet or rennet substitutes, which is followed by whey separation, characterised in that the milk is directly acidified without fermentation (e.g. by chemical or physical means).

A23C 19/05

Treating milk before coagulation; Separating whey from curd (19/097, [N: A23C19/045] take precedence)

Definition statement

This subclass/group covers:

Methods for preparing cheese curd, wherein milk is treated before coagulation. Separation of whey from curd.

References relevant to classification in this group

This subclass/group does not cover:

Coagulation of milk without rennet or rennet substitutes	A23C 19/045
Treatment of milk by ultrafiltration, microfiltration or diafiltration	A23C 9/1422
Preservation of cheese and cheese preparations (e.g. pasteurisation)	A23C 19/097

A23C 19/051

[N: Acidifying by combination of acid fermentation and of chemical or physical means]

Definition statement

This subclass/group covers:

Methods for preparing cheese curd, wherein before coagulation the milk is acidified by acid fermentation combined with chemical or physical means, e.g. the acidification of the milk before the coagulation of the casein and the formation of the curd is performed by combining lactic acid fermentation and chemical or physical means like hydrochloric acid or electrolysis

A23C 19/052

[N: Acidifying only by chemical or physical means]

Definition statement

This subclass/group covers:

Methods for preparing cheese curd, wherein before coagulation the milk is acidified only by chemical or physical means.

A23C 19/053

[N: Enrichment of milk with whey, whey components, substances recovered from separated whey, isolated or concentrated proteins from milk]

Definition statement

This subclass/group covers:

Methods for preparing cheese curd, wherein before coagulation of the milk, whey, whey components, substances recovered from separated whey, or

isolated or concentrated milk proteins (e.g. WPC, WPI) are added to the milk (thereby "enriching" the milk).

A23C 19/054

[N: using additives other than acidifying agents, NaCl, CaCl₂, dairy products, proteins, fats, enzymes or micro-organisms]

Definition statement

This subclass/group covers:

Methods for preparing cheese curd, wherein before coagulation, the milk is treated with additives other than the following: acidifying agents, NaCl, CaCl₂, dairy product, proteins, fats, enzymes or micro-organisms.

A23C 19/055

Addition of non-milk fats or non-milk proteins, [N: polyol fatty acid polyesters or mineral oils]

Definition statement

This subclass/group covers:

Methods for preparing cheese curd, wherein non-milk fats or proteins are added (including polyol fatty acid polyesters or mineral oils).

A23C 19/06

Treating cheese curd after whey separation; Products obtained thereby (A23C19/097 takes precedence)

Definition statement

This subclass/group covers:

Methods for treating cheese curd after whey separation (including treatment of cheese curd prepared without whey separation) and products obtained thereby.

References relevant to classification in this group

This subclass/group does not cover:

Preservation of cheese and cheese preparations	A23C 19/097
--	-----------------------------

A23C 19/061

[N: Addition of, or treatment with, micro-organisms
(A23C19/0682 takes precedence)]

Definition statement

This subclass/group covers:

Methods for treating cheese curd after whey separation (including treatment of cheese curd prepared without whey separation) wherein micro-organisms are added to the curd, or used for the treatment thereof, respectively, and products obtained thereby.

References relevant to classification in this group

This subclass/group does not cover:

Mould-ripened or bacterial surface ripened cheese	A23C 19/0682
---	------------------------------

A23C 19/062

[N: using only lactic acid bacteria, e.g. pediococcus, leuconostoc or bifidus sp., or propionic acid bacteria;
Treatment with non-specified acidifying bacterial cultures]

Definition statement

This subclass/group covers:

Methods for treating cheese curd after whey separation (including treatment of cheese curd prepared without whey separation) wherein only lactic or propionic acid bacteria (including *Pediococcus*, *Leuconostoc*, *Bifidobacteria*) or non-specified acidifying bacterial cultures are added to the curd, or used for the treatment thereof, respectively, and products obtained thereby.

A23C 19/063

[N: Addition of, or treatment with, enzymes or cell-free extracts of micro-organisms]

Definition statement

This subclass/group covers:

Methods for treating cheese curd after whey separation (including treatment of cheese curd prepared without whey separation) wherein enzymes or cell-free extracts of micro-organisms are added to the curd, or used for the treatment thereof, respectively, and products obtained thereby.

A23C 19/064

Salting

Definition statement

This subclass/group covers:

Methods for salting cheese curd after whey separation (including treatment of cheese curd prepared without whey separation) and products obtained thereby.

A23C 19/068

Particular types of cheese

Definition statement

This subclass/group covers:

Particular types of cheese, such as Cheddar, Mozzarella, cottage cheese and process cheese, as well as aspects of the methods for preparing said particular types of cheese which are associated specifically with the particularity thereof, and not covered elsewhere.

References relevant to classification in this group

This subclass/group does not cover:

Making cheese curd in general	A23C 19/02
-------------------------------	----------------------------

A23C 19/0682

[N: Mould-ripened or bacterial surface ripened cheeses]

Definition statement

This subclass/group covers:

Mould-ripened or bacterial surface ripened cheese, as well as aspects of the methods for their preparation associated specifically with mould or bacterial surface ripening, and not covered elsewhere.

A23C 19/0684

[N: Soft uncured Italian cheeses, e.g. Mozzarella, Ricotta, Pasta filata cheese; Other similar stretched cheeses]

Definition statement

This subclass/group covers:

Soft uncured Italian type cheeses, pasta filata cheese (e.g. Mozzarella) and other similar stretched cheeses, as well as aspects of the methods for the preparation thereof associated specifically with the characteristic properties of said cheeses, and not covered elsewhere.

A23C 19/0686

[N: Cheese from whey, e.g. mysost]

Definition statement

This subclass/group covers:

Cheese from whey (e.g. Ricotta, Mysost) as well as aspects of the methods for the preparation thereof associated specifically with the characteristic properties of said cheeses, and not covered elsewhere.

A23C 19/0688

[N: Hard cheese or semi-hard cheese with or without eyes (A23C19/072 takes precedence)]

Definition statement

This subclass/group covers:

Hard or semi-hard cheese other than cheddar, as well as aspects of the methods for the preparation thereof associated specifically with the characteristic properties of said cheeses, and not covered elsewhere.

References relevant to classification in this group

This subclass/group does not cover:

Cheddar type and similar hard cheese without eyes	A23C 19/072
---	-----------------------------

A23C 19/072

Cheddar type [N: or similar hard cheeses without eyes]

Definition statement

This subclass/group covers:

Cheddar type cheese and similar hard cheeses without eyes, as well as aspects of the methods for the preparation thereof associated specifically with

the characteristic properties of said cheeses, and not covered elsewhere.

References relevant to classification in this group

This subclass/group does not cover:

Hard and semi-hard cheese other than cheddar type or similar hard cheeses without eyes	A23C 19/0688
--	------------------------------

Special rules of classification within this subgroup

The wording "similar hard cheeses" in the title is somewhat vague. It is preferred to classify only cheddar cheese and cheeses explicitly designated as being similar to cheddar in this group.

A23C 19/076

Soft unripened cheese, e.g. cottage or cream cheese

Definition statement

This subclass/group covers:

Soft unripened cheese (e.g. cottage cheese, cream cheese, fresh cheese), as well as aspects of the methods for the preparation thereof associated specifically with the characteristic properties of said cheeses, and not covered elsewhere.

Special rules of classification within this group

Please note that process cheese is often incorrectly designated as cream cheese. Process cheese preparation usually involves melting of cheese curd (usually at about 60-65 °C or more) and emulsification. If both steps are not mentioned, the maximum temperature at which the curd is treated and the duration of the heat treatment should be considered for delimiting process cheese from cream cheese.

A23C 19/0765

[N: Addition to the curd of additives other than acidifying agents, dairy products, proteins except gelatine, fats, enzymes, micro-organisms, NaCl, CaCl₂ or KCl; Foamed fresh cheese products]

Definition statement

This subclass/group covers:

Methods for preparing soft unripened cheese (e.g. cottage cheese, cream cheese) wherein an additive other than acidifying agents, dairy products, proteins - except gelatine -, fats, enzymes, micro-organisms, NaCl, CaCl₂ or KCl is used, as well as aspects of the methods for the preparation thereof associated specifically with the characteristic properties of said cheese, and not covered elsewhere. Foamed fresh cheese products (i.e. fresh cheese products containing gas as additive).

A23C 19/08

Process cheese preparations; Making thereof, e.g. melting, emulsifying, sterilizing

Definition statement

This subclass/group covers:

Process cheese preparations and methods for their preparation (e.g. melting, emulsifying, sterilising).

References relevant to classification in this group

This subclass/group does not cover:

Cream cheese	A23C 19/076
--------------	-----------------------------

Special rules of classification within this subgroup

Please note that process cheese is often incorrectly designated as cream cheese. Process cheese preparation usually involves melting of cheese curd (usually at about 60-65 °C or more) and emulsification. If both steps are not mentioned, the maximum temperature at which the curd is treated and the duration of the heat treatment should be considered for delimiting process cheese from cream cheese.

A23C 19/081

[N: Surface melting]

Definition statement

This subclass/group covers:

Surface melting used in the preparation of process cheese preparations.

A23C 19/082

Adding substances to the curd before or during melting; Melting salts

Definition statement

This subclass/group covers:

Methods for preparing process cheese preparations, wherein substances are added to the curd or cheese before or during melting, as well as melting salts.

A23C 19/084

Treating the curd, or adding substances thereto, after melting (adding non-milk components A23C19/093)

Definition statement

This subclass/group covers:

Methods for preparing process cheese preparations, wherein after melting the curd is treated, or substances are added thereto.

References relevant to classification in this group

This subclass/group does not cover:

Addition of non-milk components to process cheese preparations after melting	A23C 19/093
--	-----------------------------

A23C 19/086

Cheese powder; Dried cheese preparations

Definition statement

This subclass/group covers:

Cheese powder and dried cheese preparations.

A23C 19/09

Other cheese preparations; Mixtures of cheese with other foodstuffs (preservation A23C19/097)

Definition statement

This subclass/group covers:

Other cheese preparations and mixtures of cheese with other foodstuffs, as

well as methods for their preparation.

References relevant to classification in this group

This subclass/group does not cover:

Preservation of cheese and cheese preparations	A23C 19/097
--	-----------------------------

A23C 19/0904

[N: Liquid cheese products, e.g. beverages, sauces]

Definition statement

This subclass/group covers:

Liquid cheese products, e.g. cheese sauces and cheese beverages, as well as methods for their preparation.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Sauces in general	A23L 1/39
Dressings containing milk products or milk derivatives	A23L 1/246

A23C 19/0908

[N: Sliced cheese; Multilayered or stuffed cheese; Cheese loaves]

Definition statement

This subclass/group covers:

Sliced, multilayered or stuffed cheese, and cheese loaves, as well as methods for their preparation.

A23C 19/0912

[N: Fried, baked or roasted cheese products, e.g. cheese cakes; Foamed cheese products, e.g. soufflès; Expanded cheese in solid form]

Definition statement

This subclass/group covers:

Fried, baked or roasted cheese products (e.g. cheese cakes), foamed cheese products (e.g. soufflés), and expanded cheese in solid form.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Foamed fresh cheese products	A23C 19/0765
------------------------------	------------------------------

A23C 19/0917

[N: Addition, to cheese or curd, of whey, whey components, substances recovered from separated whey, isolated or concentrated proteins from milk]

Definition statement

This subclass/group covers:

Other cheese preparations and mixtures of cheese with other foodstuffs obtained by addition, to cheese or curd, of whey, whey components, substances recovered from separated whey, or isolated or concentrated proteins from milk.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Addition to milk of whey, whey components, substances recovered from separated whey, or isolated or concentrated proteins from milk before coagulation	A23C 19/053
--	-----------------------------

A23C 19/0921

[N: Addition, to cheese or curd, of minerals, including organic salts thereof, trace elements, amino acids, peptides, protein hydrolysates, nucleic acids, yeast extracts or autolysate, vitamins or derivatives of these compounds]

Definition statement

This subclass/group covers:

Other cheese preparations and mixtures of cheese with other foodstuffs obtained by addition, to cheese or curd, of minerals (including organic salts thereof), trace elements, amino acids, peptides, protein hydrolysates, nucleic acids, yeast extracts or yeast autolysate, vitamins, or derivatives of these compounds.

A23C 19/0925

[N: Addition, to cheese or curd, of colours, synthetic flavours or artificial sweeteners, including sugar alcohols]

Definition statement

This subclass/group covers:

Other cheese preparations and mixtures of cheese with other foodstuffs obtained by addition, to cheese or curd, of colorants, synthetic flavours, or artificial sweeteners, including sugar alcohols.

A23C 19/093

Addition of non-milk fats or non-milk proteins, [N: polyol fatty acid polyesters or mineral oils]

Definition statement

This subclass/group covers:

Other cheese preparations and mixtures of cheese with other foodstuffs obtained by addition of non-milk proteins or non-milk fats, including polyol fatty acid polyesters or mineral oils.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Addition to milk of non-milk proteins or non-milk fats, including polyol fatty acid polyesters or mineral oils, before coagulation	A23C 19/055
--	-----------------------------

A23C 19/097

Preservation

Definition statement

This subclass/group covers:

Preservation of cheese curd, cheese, cheese preparations, and mixtures of cheese with other foodstuffs.

A23C 19/0973

[N: Pasteurisation; Sterilisation; Hot packaging]

Definition statement

This subclass/group covers:

Preservation of cheese, cheese preparations, and mixtures of cheese with other foodstuffs by pasteurisation or sterilisation, as well as hot packaging methods.

A23C 19/0976

[N: Freezing; Treating cheese in frozen state; Thawing of frozen cheese]

Definition statement

This subclass/group covers:

Preservation of cheese, cheese preparations, and mixtures of cheese with other foodstuffs by freezing. Treatment of cheese in the frozen state and thawing of frozen cheese.

A23C 19/10

Addition of preservatives [N: (enzymes or micro-organisms, see A23C19/032, A23C19/04, A23C19/061 and A23C19/063)]

Definition statement

This subclass/group covers:

Preservation of cheese, cheese preparations, and mixtures of cheese with other foodstuffs using preserving agents.

References relevant to classification in this group

This subclass/group does not cover:

Use of enzymes or micro-organisms in cheese making	A23C 19/032 , A23C 19/04 , A23C 19/061 , A23C 19/063
--	--

A23C 19/105

[N: Inorganic compounds; Inert or noble gases; Carbon dioxide]

Definition statement

This subclass/group covers:

Preservation of cheese, cheese preparations, and mixtures of cheese with other foodstuffs using inorganic compounds, inert or noble gases, or carbon dioxide as preserving agents.

A23C 19/11

of antibiotics [N: or bacteriocins]

Definition statement

This subclass/group covers:

Preservation of cheese, cheese preparations, and mixtures of cheese with other foodstuffs using antibiotics or bacteriocins (e.g. nisin) as preserving agents.

A23C 19/14

Treating cheese after having reached its definite form, e.g. ripening, smoking (preservation A23C19/097)

Definition statement

This subclass/group covers:

Methods for treating cheese wherein the cheese is treated after reaching its definite form, e.g. ripening or smoking.

References relevant to classification in this group

This subclass/group does not cover:

After-treatment of cheese; Marking, coating, milling or recasting the cheese.	A01J 27/00
Preservation of cheese, cheese preparations, and mixtures of cheese with other foodstuffs.	A23C 19/097
Smoking of meat, sausages, fish	A23B 4/044

A23C 19/16

Covering the cheese surface, e.g. with paraffin wax

Definition statement

This subclass/group covers:

Methods for treating cheese after reaching its definite form by covering the cheese surface (e.g. with paraffin wax).

References relevant to classification in this group

This subclass/group does not cover:

After-treatment of cheese; Marking, coating, milling or recasting the cheese.	A01J 27/00
---	----------------------------

A23C 19/163

[N: with a non-edible liquid or semi-liquid coating, e.g. wax, polymer dispersions (in combination with an edible coating A23C19/16)]

Definition statement

This subclass/group covers:

Methods for treating cheese after reaching its definite form by covering the cheese surface with a non-edible (semi-) liquid coating, e.g. wax or polymer dispersions.

References relevant to classification in this group

This subclass/group does not cover:

Methods for treating cheese after reaching its definite form by covering the cheese surface with a non-edible (semi-) liquid coating in combination with an edible coating	A23C 19/16
--	----------------------------

A23C 19/166

[N: with non-edible preformed foils, films or bandages]

Definition statement

This subclass/group covers:

Methods for treating cheese after reaching its definite form by covering the cheese surface with non-edible preformed foils, films or bandages.

A23C 20/00

Cheese substitutes (A23C19/055, A23C19/093 take precedence)

Definition statement

This subclass/group covers:

Cheese substitutes and methods for their preparation.

References relevant to classification in this group

This subclass/group does not cover:

Addition of non-milk proteins or non-milk fats (including polyol fatty acid polyesters or mineral oils) to cheese milk	A23C 19/055
Other cheese preparations and mixtures of cheese with other foodstuffs obtained by addition of non-milk proteins or non-milk fats, including polyol fatty acid polyesters or mineral oils.	A23C 19/093

A23C 20/005

[N: mainly containing proteins from pulses or oilseeds, e.g. soy curd, tofu]

Definition statement

This subclass/group covers:

Cheese substitutes containing proteins mainly from pulses or oilseeds, e.g. tofu, soy curd, and methods for their preparation.

References relevant to classification in this group

This subclass/group does not cover:

Cheese substitutes containing neither milk components, nor caseinate, nor lactose, as protein, fat or carbohydrate source	A23C 20/02
---	----------------------------

A23C 20/02

containing neither milk components, nor caseinate, nor lactose, as sources of fats, proteins or carbohydrates

Definition statement

This subclass/group covers:

Cheese substitutes containing neither milk components, nor caseinate, nor lactose, as protein, fat or carbohydrate source, and methods for their preparation.

A23C 20/025

[N: mainly containing proteins from pulses or oilseeds, e.g. soy curd, tofu]

Definition statement

This subclass/group covers:

Cheese substitutes containing neither milk components, nor caseinate, nor lactose, as protein, fat or carbohydrate source, and containing proteins mainly from pulses or oilseeds (e.g. tofu, soy curd), as well as methods for their preparation.

A23C 21/00

Whey; Whey preparations (A23C1/00, A23C3/00, A23C9/14 take precedence)

Definition statement

This subclass/group covers:

Whey and whey preparations, and methods for their preparation.

References relevant to classification in this group

This subclass/group does not cover:

Methods for concentration, evaporation or drying	A23C 1/00
--	---------------------------

Preservation of milk and milk preparations	A23C 3/00
Methods for preparing milk (powder) preparations wherein the chemical composition of the milk [or whey] is modified by non-chemical treatment (e.g. ultrafiltration, microfiltration)	A23C 9/14
Obtaining dairy proteins from foodstuffs from milk or whey (e.g. casein or caseinates)	A23J 1/20

A23C 21/02

containing, or treated with, micro-organisms or enzymes

Definition statement

This subclass/group covers:

Whey and whey preparations containing or treated with, respectively, micro-organisms or enzymes, as well as methods for their preparation.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Fermented milk preparations and/or treatment of milk using micro-organisms or enzymes	A23C 9/12
Processes using micro-organisms in general	C12R 1/00
Mutation or genetic engineering of micro-organisms in general	C12N 15/00
Enzymes in general	C12N 9/00
Propagation of micro-organisms in general	C12N 1/00

A23C 21/023

[N: Lactose hydrolysing enzymes, e.g. lactase, B-galactosidase]

Definition statement

This subclass/group covers:

Whey and whey preparations containing or treated with, respectively, lactose hydrolysing enzymes (e.g. lactase, beta-glucosidase), as well as methods for their preparation.

A23C 21/026

[N: containing, or treated only with, lactic acid producing bacteria, bifidobacteria or propionic acid bacteria]

Definition statement

This subclass/group covers:

Whey and whey preparations containing or treated only with, respectively, lactic acid producing bacteria, bifidobacteria or propionic acid bacteria, as well as methods for their preparation.

A23C 21/04

containing non-milk components as source of fats or proteins

Definition statement

This subclass/group covers:

Whey and whey preparations containing non-milk components as source of fats or proteins, as well as methods for their preparation.

A23C 21/06

Mixtures of whey with milk products or milk components

Definition statement

This subclass/group covers:

Mixtures of whey with milk products or milk components, as well as methods for their preparation.

A23C 21/08

containing other organic additives, e.g. vegetable or animal products

Definition statement

This subclass/group covers:

Whey and whey preparations containing other organic additives, e.g. vegetable or animal products, as well as methods for their preparation.

A23C 21/10

containing inorganic additives

Definition statement

This subclass/group covers:

Whey and whey preparations containing inorganic additives, as well as methods for their preparation.

A23C 23/00

Other dairy products

Definition statement

This subclass/group covers:

Other dairy products (i.e. dairy products not covered by the preceding classes).