

FOODSTUFFS; TOBACCO**A21 BAKING; EQUIPMENT FOR MAKING OR PROCESSING DOUGHS; DOUGHS FOR BAKING [1,8]****Note**

Processes using enzymes or micro-organisms in order to:

(i) liberate, separate or purify a pre-existing compound or composition, or to

(ii) treat textiles or clean solid surfaces of materials

are further classified in subclass C12S. [5]

A21B BAKERS' OVENS; MACHINES OR EQUIPMENT FOR BAKING (domestic baking equipment A47J 37/00; combustion apparatus F23; domestic stoves or ranges being wholly or partly ovens F24B, F24C)

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|-------------|---|-------------|--|
| 1/00 | Bakers' ovens | 2/00 | Baking apparatus employing high-frequency or infra-red heating |
| 1/02 | . characterised by the heating arrangements | 3/00 | Parts or accessories of ovens |
| 1/04 | . . Ovens heated by fire before baking only | 3/02 | . Doors; Flap gates (general features of doors E06B) |
| 1/06 | . . Ovens heated by radiators | 3/04 | . Air-treatment devices for ovens, e.g. regulating humidity |
| 1/08 | . . . by steam-heated radiators | 3/07 | . Charging or discharging ovens (A21B 3/18 takes precedence) |
| 1/10 | . . . by radiators heated by fluids other than steam | 3/10 | . Means for illuminating ovens |
| 1/14 | . . . Arrangement of radiators | 3/13 | . Baking-tins; Baking forms |
| 1/22 | . . . by electric radiators (A21B 2/00 takes precedence; electric heating elements H05B) | 3/15 | . Baking sheets; Baking boards |
| 1/24 | . . Ovens heated by media flowing therethrough | 3/16 | . Machines for cleaning or greasing baking surfaces |
| 1/26 | . . . by hot air | 3/18 | . Discharging baked goods from tins (unpacking in general B65B 69/00) |
| 1/28 | . . . by gaseous combustion products | 5/00 | Baking apparatus for special goods; Other baking apparatus |
| 1/33 | . . Ovens heated directly by combustion products (A21B 1/04 takes precedence) | 5/02 | . Apparatus for baking hollow articles, waffles, pastry, biscuits, or the like |
| 1/36 | . . Ovens heated directly by hot fluid (A21B 1/06, A21B 1/33 take precedence) | 5/03 | . . . for baking pancakes (frying pans A47J 37/10) [3] |
| 1/40 | . characterised by the means for regulating the temperature (temperature-sensitive elements G01K) | 5/04 | . Apparatus for baking cylindrical cakes on spits |
| 1/42 | . characterised by the baking surfaces moving during the baking (conveying in general B65G) | 5/06 | . Apparatus for baking in salt solution, e.g. for making pretzels |
| 1/44 | . . with surfaces rotating in a horizontal plane | 5/08 | . Apparatus for baking in baking fat or oil, e.g. for making doughnuts |
| 1/46 | . . with surfaces suspended from an endless conveyer or a revolving wheel | 7/00 | Baking plants |
| 1/48 | . . with surfaces in the form of an endless band | | |
| 1/50 | . characterised by having removable baking surfaces | | |
| 1/52 | . Portable ovens; Collapsible ovens (travelling or camp cookers A47J 33/00) | | |

A21C MACHINES OR EQUIPMENT FOR MAKING OR PROCESSING DOUGHS; HANDLING BAKED ARTICLES MADE FROM DOUGH**Subclass Index****WORKING DOUGH BEFORE BAKING**

| | |
|--------------------------------------|-------------------|
| Mixing, kneading, homogenising | 1/00, 7/00 |
| Shaping | 3/00, 11/00 |
| Dividing; handling | 5/00; 9/00, 11/00 |

APPARATUS PERMITTING DOUGH TO

| | |
|--|-------|
| RISE | 13/00 |
| OTHER MACHINES OR EQUIPMENT FOR MAKING OR PROCESSING DOUGH | 14/00 |
| HANDLING BAKED ARTICLES | 15/00 |

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|-------------|---|------|---|
| 1/00 | Mixing or kneading machines for the preparation of dough (domestic mixing or kneading machines A47J 43/00, A47J 44/00) | 1/04 | . with inclined rotating mixing arms or levers |
| 1/02 | . with vertically-mounted tools; Machines for whipping or beating | 1/06 | . with horizontally-mounted mixing or kneading tools; Worm mixers |
| | | 1/08 | . with rollers |

A21C – A21D

- 1/10 . with additional aerating apparatus for the manufacture of aerated doughs
- 1/12 . for the preparation of dough directly from grain
- 1/14 . Structural elements of mixing or kneading machines

- 3/00 Machines or apparatus for shaping batches of dough before subdivision**
- 3/02 . Dough-sheeters; Rolling-machines; Rolling-pins
- 3/04 . Dough-extruding machines
- 3/06 . Machines for coiling sheets of dough, e.g. for producing rolls
- 3/08 . Machines for twisting strips of dough, e.g. for making pretzels
- 3/10 . combined with dough-dividing apparatus

- 5/00 Dough-dividing machines**
- 5/02 . with division boxes and ejection plungers
- 5/04 . . with division boxes in a revolving body with radially-working pistons
- 5/06 . . with division boxes in a revolving body with axially-working pistons
- 5/08 . with radial, i.e. star-like, cutter-blades slidable in the slots of, and relatively to, a pressing-plunger

- 7/00 Machines which homogenise the subdivided dough by working other than by kneading**
- 7/01 . with endless bands
- 7/02 . with moulding channels (A21C 7/01 takes precedence)
- 7/04 . with moulding cups (A21C 7/01 takes precedence)
- 7/06 . combined with dividing machines with radial, i.e. star-like, cutter-blades slidable in the slots of, and relatively to, a pressing-plunger

- 9/00 Other apparatus for handling dough or dough pieces**
- 9/02 . Apparatus for hanging or distributing strings of dough, such as noodles, spaghetti or macaroni, on bars
- 9/04 . Apparatus for spreading granular material on, or sweeping or coating the surfaces of, pieces or sheets of dough

- 9/06 . Apparatus for filling pieces of dough such as doughnuts
- 9/08 . Depositing, arranging and conveying apparatus for handling pieces, e.g. sheets of dough

- 11/00 Other machines for forming the dough into its final shape before cooking or baking**
- 11/02 . Embossing machines
- 11/04 . . with cutting and embossing rollers or drums
- 11/06 . . handling regularly pre-shaped sheets of dough
- 11/08 . . with engraved moulds, e.g. rotary machines with die rolls
- 11/10 . combined with cutting apparatus
- 11/12 . Apparatus for slotting, slitting or perforating the surface of pieces of dough
 - 11/14 . . for star-like stamping
- 11/16 . Extruding machines
 - 11/18 . . with pistons
 - 11/20 . . with worms
- 11/22 . Apparatus with rollers and cutting discs or blades for shaping noodles
- 11/24 . Apparatus for cutting out noodles from a sheet or ribbon of dough by an engaging pair of grooved rollers

- 13/00 Provers, i.e. apparatus permitting dough to rise**
- 13/02 . with endless conveyers

- 14/00 Machines or equipment for making or processing dough, not provided for in other groups of this subclass [8]**

- 15/00 Apparatus for handling baked articles**
- 15/02 . Apparatus for shaping or moulding baked wafers; Making multi-layer wafer sheets
- 15/04 . Cutting or slicing machines or devices specially adapted for baked articles other than bread (for cutting or slicing bread B26B, B26D)

A21D TREATMENT, E.G. PRESERVATION, OF FLOUR OR DOUGH FOR BAKING, E.G. BY ADDITION OF MATERIALS; BAKING; BAKERY PRODUCTS; PRESERVATION THEREOF [1,8]

Subclass Index

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|--|--|
| PRODUCTS BEFORE BAKING; TREATMENT OR CONSERVATION THEREOF.....10/00; 2/00 to 8/00 | BAKING OF DOUGH..... 8/00 BAKERY PRODUCTS; PRESERVATION OR REFRESHING THEREOF 13/00; 15/00, 17/00 |
|--|--|

2/00 Treatment of flour or dough by adding materials thereto before or during baking (A21D 10/00 takes precedence) [2,8]

Note

In groups A21D 2/02 to A21D 2/40, in the absence of an indication to the contrary, a substance is classified in the last appropriate place.

- 2/02 . by adding inorganic substances
- 2/04 . . Oxygen; Oxygen-generating compounds, e.g. ozone, peroxides
- 2/06 . . Reducing agents

- 2/08 . by adding organic substances
- 2/10 . . Hydrocarbons
- 2/12 . . Halohydrocarbons
- 2/14 . . Organic oxygen compounds
- 2/16 . . . Fatty acid esters
- 2/18 . . . Carbohydrates
- 2/20 . . . Peroxides
- 2/22 . . . Ascorbic acid
- 2/24 . . Organic nitrogen compounds
- 2/26 . . . Proteins
- 2/28 . . Organic sulfur compounds
- 2/30 . . Organic phosphorus compounds

- 2/32 . . . Phosphatides
- 2/34 . . Animal material
- 2/36 . . Vegetable material
- 2/38 . . . Seed germs; Germinated cereals; Extracts thereof
- 2/40 . Apparatus for the chemical treatment of flour or dough

- 4/00 Preserving flour or dough before baking by storage in an inert atmosphere**

- 6/00 Other treatment of flour or dough before baking, e.g. cooling, irradiating, heating [2]**

- 8/00 Methods for preparing dough or for baking**
(A21D 2/00 takes precedence)
- 8/02 . Methods for preparing dough; Treating dough prior to baking (machines or equipment for making or processing dough A21C)
- 8/04 . . treating dough with micro-organisms or enzymes
- 8/06 . Baking processes (bakers' ovens A21B)
- 8/08 . Prevention of sticking, e.g. to baking plates
- 8/10 . . using dusting powders

- 10/00 Batters, dough or mixtures before baking [2]**
- 10/02 . Ready-for-oven doughs, e.g. packaged doughs [2]
- 10/04 . Batters [2]

- 13/00 Finished or partly finished bakery products**
- 13/02 . Bread from whole meal or containing rough-ground grain or bran
- 13/04 . Bread from materials other than rye or wheat flour
- 13/06 . Bread with modified starch or protein content [2]
- 13/08 . Pastry, e.g. cake, biscuit, puff-pastry (icing or frosting or mixes therefor A23G 3/00)

- 15/00 Preserving finished bakery products; Improving**
(refreshing A21D 17/00; packaging or wrapping bakery products B65B, e.g. B65B 23/10, B65B 25/16) [2]
- 15/02 . by cooling [2]
- 15/04 . by heat treatment [2]
- 15/06 . by irradiation [2]
- 15/08 . by coating [2]

- 17/00 Refreshing bakery products** (improving A21D 15/00) [2]