

## 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)

<b>1/00</b>	<b>Bakers' ovens</b>	<b>2/00</b>	<b>Baking apparatus employing high-frequency or infra-red heating</b>
1/02	. characterised by the heating arrangements	<b>3/00</b>	<b>Parts or accessories of ovens</b>
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	<b>5/00</b>	<b>Baking apparatus for special goods; Other baking apparatus</b>
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	<b>7/00</b>	<b>Baking plants</b>
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

<b>1/00</b>	<b>Mixing or kneading machines for the preparation of dough</b> (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	9/06	. Apparatus for filling pieces of dough such as doughnuts
1/12	. for the preparation of dough directly from grain	9/08	. Depositing, arranging and conveying apparatus for handling pieces, e.g. sheets of dough
1/14	. Structural elements of mixing or kneading machines		
<b>3/00</b>	<b>Machines or apparatus for shaping batches of dough before subdivision</b>	<b>11/00</b>	<b>Other machines for forming the dough into its final shape before cooking or baking</b>
3/02	. Dough-sheeters; Rolling-machines; Rolling-pins	11/02	. Embossing machines
3/04	. Dough-extruding machines	11/04	. . with cutting and embossing rollers or drums
3/06	. Machines for coiling sheets of dough, e.g. for producing rolls	11/06	. . handling regularly pre-shaped sheets of dough
3/08	. Machines for twisting strips of dough, e.g. for making pretzels	11/08	. . with engraved moulds, e.g. rotary machines with die rolls
3/10	. combined with dough-dividing apparatus	11/10	. combined with cutting apparatus
		11/12	. Apparatus for slotting, slitting or perforating the surface of pieces of dough
<b>5/00</b>	<b>Dough-dividing machines</b>	11/14	. . for star-like stamping
5/02	. with division boxes and ejection plungers	11/16	. Extruding machines
5/04	. . with division boxes in a revolving body with radially-working pistons	11/18	. . with pistons
5/06	. . with division boxes in a revolving body with axially-working pistons	11/20	. . with worms
5/08	. with radial, i.e. star-like, cutter-blades slidable in the slots of, and relatively to, a pressing-plunger	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
<b>7/00</b>	<b>Machines which homogenise the subdivided dough by working other than by kneading</b>	<b>13/00</b>	<b>Provers, i.e. apparatus permitting dough to rise</b>
7/01	. with endless bands	13/02	. with endless conveyers
7/02	. with moulding channels (A21C 7/01 takes precedence)		
7/04	. with moulding cups (A21C 7/01 takes precedence)	<b>14/00</b>	<b>Machines or equipment for making or processing dough, not provided for in other groups of this subclass [8]</b>
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		
<b>9/00</b>	<b>Other apparatus for handling dough or dough pieces</b>	<b>15/00</b>	<b>Apparatus for handling baked articles</b>
9/02	. Apparatus for hanging or distributing strings of dough, such as noodles, spaghetti or macaroni, on bars	15/02	. Apparatus for shaping or moulding baked wafers; Making multi-layer wafer sheets
9/04	. Apparatus for spreading granular material on, or sweeping or coating the surfaces of, pieces or sheets of dough	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

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
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**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	10/00	<b>Batters, dough or mixtures before baking [2]</b>
2/34	. . Animal material	10/02	. Ready-for-oven doughs, e.g. packaged doughs [2]
2/36	. . Vegetable material	10/04	. Batters [2]
2/38	. . . Seed germs; Germinated cereals; Extracts thereof	13/00	<b>Finished or partly finished bakery products</b>
2/40	. Apparatus for the chemical treatment of flour or dough	13/02	. Bread from whole meal or containing rough-ground grain or bran
4/00	<b>Preserving flour or dough before baking by storage in an inert atmosphere</b>	13/04	. Bread from materials other than rye or wheat flour
6/00	<b>Other treatment of flour or dough before baking, e.g. cooling, irradiating, heating [2]</b>	13/06	. Bread with modified starch or protein content [2]
8/00	<b>Methods for preparing dough or for baking</b> (A21D 2/00 takes precedence)	13/08	. Pastry, e.g. cake, biscuit, puff-pastry (icing or frosting or mixes therefor A23G 3/00)
8/02	. Methods for preparing dough; Treating dough prior to baking (machines or equipment for making or processing dough A21C)	15/00	<b>Preserving finished bakery products; Improving</b> (refreshing A21D 17/00; packaging or wrapping bakery products B65B, e.g. B65B 23/10, B65B 25/16) [2]
8/04	. . treating dough with micro-organisms or enzymes	15/02	. by cooling [2]
8/06	. Baking processes (bakers' ovens A21B)	15/04	. by heat treatment [2]
8/08	. Prevention of sticking, e.g. to baking plates	15/06	. by irradiation [2]
8/10	. . using dusting powders	15/08	. by coating [2]
		17/00	<b>Refreshing bakery products</b> (improving A21D 15/00) [2]