CPC  COOPERATIVE PATENT CLASSIFICATION

A  HUMAN NECESSITIES

FOODSTUFFS; TOBACCO

A22  BUTCHERING; MEAT TREATMENT; PROCESSING POULTRY OR FISH

A22C  PROCESSING MEAT, POULTRY, OR FISH (preserving A23B; obtaining protein compositions for foodstuffs A23J 1/00; fish, meat or poultry preparations A23L; disintegrating, e.g. chopping meat, B02C 18/00; preparation of proteins C07K 1/00)

WARNING
In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Processing meat

| 5/00 | Apparatus for mixing meat, sausage-meat, or meat products (mixing in general B01F) |
| 7/00 | Apparatus for pounding, forming, or pressing meat, sausage-meat, or meat products (meat patty moulding devices for domestic use A47J 43/20; ham boilers A47J 27/20) |
| 7/0007 | . [specially adapted for making multi-layered meat products] |
| 7/0015 | . [specially adapted for making meat-balls] |
| 7/0023 | . [Pressing means] |
| 7/003 | . . [Meat-moulds] |
| 7/0038 | . . . [Demoulding means] |
| 7/0046 | . . . [Containers in which meat is pressed and moulded] |
| 7/0053 | . . . . [Stackable containers] |
| 7/0061 | . . . . [Containers for moulding and pressing ham] |
| 7/0069 | . . . [Pressing and moulding by means of a drum] |
| 7/0076 | . . [Devices for making meat patties] |
| 7/0084 | . . . [comprising a reciprocating plate] |
| 7/0092 | . [with worms or other rotary mounted members (A22C 7/0007 takes precedence)] |
| 9/00 | Apparatus for tenderising meat, e.g. ham (tenderising chemically A23L 13/00; A23L 13/70) |
| 9/001 | . [by injection] |
| 9/002 | . [by electric treatment] |
| 9/004 | . [by massaging] |
| 9/005 | . . [Tumblers and rotating drums for massaging meat in their interior] |
| 9/007 | . [by beating] |
| 9/008 | . [by piercing] |
| 11/00 | Sausage making (chemical aspects A23L 13/00; Apparatus for handling or conveying sausage products during manufacture) |
| 11/001 | . [Machines for making skinless sausages, e.g. Frankfurters, Wieners] |
| 11/003 | . [Removing casings from sausages during manufacture] |
| 11/005 | . [Apparatus for binding or tying sausages or meat, e.g. salami, rollades; Filling sausage products into sleeve netting] |
| 11/006 | . [Separating linked sausages] |
| 11/008 | . [Conveying sausages in horizontal position (conveying hanging sausages A22C 15/001)] |
| 11/02 | . Sausage filling or stuffing machines (enclosing material in preformed tubular webs B65B 9/10) |
| 11/0209 | . . [Stuffing horn assembly] |
| 11/0218 | . . . . [with multiple interchangeable stuffing horns, e.g. magazine arrangements] |
| 11/0227 | . . [Supplying casings to the stuffing device] |
| 11/0236 | . . . [from a storage device] |
| 11/0245 | . . . [Controlling devices] |
| 11/0254 | . . . . [Sizing means] |
| 11/0263 | . . . . [Braking means] |
| 11/0272 | . . . [for casing depletion] |
| 11/0281 | . . . [for sausages having at least one flat end] |
| 11/029 | . . [with coating or lubricating means] |
| 11/04 | . [with mechanically-operated piston moving to-and-fro] |
| 11/06 | . [with piston operated by liquid or gaseous means] |
| 11/08 | . [with pressing-worm or other rotary-mounted pressing-members] |
| 11/10 | . Apparatus for twisting (or linking) sausages (subdividing filled flexible tubes to form packages, involving displacement of contents B65B 9/12, by applying pressure and heat successively B65B 51/20) |

2011/0101 | . . . [for pinching and twisting] |

2011/0102 | . . . [and twisting in opposite directions] |

11/04 | . . [by means of shear or blade elements] |

11/05 | . . . . [The sheer or blade elements being displaceable parallel to the sausage string in order to create a narrow point free of meat] |

11/07 | . . . [A string passing between two rotary members comprising dividing elements cooperating with each other] |

11/08 | . . [with dividing elements located on the surface of a single rotary member] |

11/12 | . Apparatus for tying sausage skins (clipping sausage skins (applying clips or binding material to package folds or closures, e.g. to twisted bag necks B65B 51/04, B65B 51/08)) |

11/122 | . . [by forming knots] |

11/125 | . . [by clipping; Removal of clips] |
A22C 17/14

Sausage casings [(made of animal intestines A22C 17/14)]

13/003 . . . (Apparatus for making sausage casings, e.g. simultaneously with stuffing artificial casings (enclosing material webs being formed into tubes in situ around filling nozzles B65B 9/20))

13/006 . . . (Apparatus for making artificial collagen casings (chemical aspects A22C 15/0016))

13/009 . . . (End closures therefor)

13/013 . . . (Chemical composition of synthetic sausage casings)

13/016 . . . (based on proteins, e.g. collagen)

13/023 . . . (made by extrusion)

13/026 . . . (Chemical treatment of natural gut)

2013/003 . . . (with peeling aids, e.g. reducing adhesion between casing and product)

2013/0033 . . . (with at least one layer of a fat impermeable material)

2013/0036 . . . (with features allowing an easy opening and/or removal of the casing)

2013/004 . . . (with at least one layer of a gas, e.g. oxygen, water vapour, impermeable material)

2013/0043 . . . (with at least one layer of a water impermeable material)

2013/0046 . . . (suitable for impregnation with flavouring substances, e.g. caramel, liquid smoke, spices)

2013/005 . . . (monolayer casings)

2013/0053 . . . (multilayer casings)

2013/0056 . . . (nets and similar open structures to hold sausages and meat in general (making nets D04G; filling sausage products into sleeve netting A22C 11/005))

2013/0059 . . . (thermoelastic casings, casings with at least one layer of thermoplastics material)

2013/0063 . . . (containing polyamide, e.g. nylon, aramide)

2013/0066 . . . (casings according to the presence or absence of seams)

2013/0069 . . . (seamed casings, casings with at least one longitudinal seam)

2013/0073 . . . (seamless casings made out of a continuous seamless tubular sheet)

2013/0076 . . . (treated in order to be conferred a rough appearance)

2013/0079 . . . (printable sausage casings or sausage casings showing any kind of indicia (printing textiles D06P))

2013/0083 . . . (biaxially oriented)

2013/0086 . . . (shrinkable casings)

2013/0089 . . . (smokable casings, e.g. permeable to liquid smoke or phenol)

2013/0093 . . . (textile casings, casings with at least one layer of textile material)

2013/0096 . . . (cellulosic)

13/02 . . . (Shirring of sausage casings (storing preformed tubular webs on filling nozzles B65B 9/15))

2013/021 . . . (with pressurised air)

2013/023 . . . (holders or packs of shirred casings)

2013/025 . . . (Severing the shirred food casing)

2013/026 . . . (Shirring netting onto a tube)

2013/028 . . . (Supplying and shirring casings)

13/0006 . . . ([filling and conveying sausage products during manufacture A22C 11/00; transport through slaughterhouses A22B 7/001; poultry shackles A22C 21/007; conveying poultry A22C 21/0053])

15/001 . . . (Specially adapted for hanging or conveying several sausages or strips of meat)

15/002 . . . (Loops, hooks, cords for suspending single sausages; apparatus for making or conveying loops for sausages)

15/003 . . . (Hooks or the like specially adapted for meat or hams or part of carcasses (spreaders for cattle A22B 5/006))

15/005 . . . (Hangers with more hooks penetrating the piece of meat)

15/006 . . . (Apparatus for inserting a cord into a piece of meat)

15/007 . . . (Racks for storing or smoking suspended meat or sausages (racks for pressing meat A22C 7/0023))

15/008 . . . (Cages specially adapted for suspending hams, meat or sausages)

17/00 . . . (Other devices for processing meat or bones)

17/0006 . . . (Cutting or shaping meat)

17/0013 . . . (Boards or blocks for cutting or chopping meat)

17/002 . . . (Producing portions of meat with predetermined characteristics, e.g. weight or particular dimensions)

17/0026 . . . (Mincing and grinding meat (mincing machines B02C 18/30))

17/0033 . . . (Cutting slices out of a piece of meat (slicing machines B26D 1/143))

17/004 . . . (Devices for deboning meat (deboning poultry A22C 21/0069; deboning operations on carcasses A22B 5/0035))

17/0046 . . . (specially adapted for meat containing ribs)

17/0053 . . . (by injection)

17/006 . . . (Putting meat on skewers)

17/0066 . . . (for "döner kebab", "shawarma", "gyros" or the like)

17/0073 . . . (using visual recognition, X-rays, ultrasounds, or other contactless means to determine quality or size of portioned meat)

17/008 . . . (for measuring quality, e.g. to determine further processing)

17/0086 . . . (Calculating cutting patterns based on visual recognition)

17/0093 . . . (Handling, transporting or packaging pieces of meat)

17/02 . . . (Apparatus for holding meat or bones while cutting (holding fish A22C 25/06; holding meat for carving A47J 43/18))

17/04 . . . (Bone cleaning devices)

17/06 . . . (Bone-shears; Bone-crushers)

17/08 . . . (Cleaning, e.g. washing, meat or sausages (treating offal C11B))

17/10 . . . (Marking meat or sausages (marking animals A01K 11/00; labelling B65C))

17/12 . . . (Apparatus for cutting-off rind (skinning instruments A22B 5/16))
Processing meat A22C

17/14 . Working-up animal intestines ; Treatment thereof for the manufacture of natural sausage casings (making artificial casings A22C 13/0003; chemical treatment of natural casings A22C 13/0026); Apparatus for cutting intestines; Machines for pulling intestines to pieces

17/16 . Cleaning of intestines; Machines for removing fat or slime from intestines (cleaning the stomach of slaughtered animals A22B 5/18)

18/00 Plants, factories, or the like for processing meat (for processing poultry only A22C 21/00; for processing fish only A22C 25/00)

21/00 Processing poultry
21/0007 . Poultry shackles
21/0015 . Killing poultry entering the processing machine (slaughtering pliers, slaughtering shears A22B 3/08)

21/0023 . Dividing poultry
21/003 . Filleting poultry, i.e. extracting, cutting or shaping poultry fillets
21/0038 . Trussing poultry
21/0046 . Support devices
21/0053 . Transferring or conveying devices for poultry
21/0061 . Cleaning or disinfecting poultry
21/0069 . Deboning poultry or parts of poultry
21/0076 . Deboning poultry legs or drumsticks
21/0084 . Deboning poultry wings
21/0092 . Skinning poultry or parts of poultry
21/02 . Plucking mechanisms for poultry
21/022 . with fingers
21/024 . Hand tools for plucking poultry
21/026 . with rollers
21/028 . with discs
21/04 . Scalding, singeing, waxing, or dewaxing poultry
21/06 . Eviscerating devices for poultry
21/063 . Hand tools for eviscerating poultry
21/066 . Extracting or removing the tendons from the legs of poultry

Processing fish, including shellfish

25/00 Processing fish ; Curing of fish; Stunning of fish by electric current; Investigating fish by optical means (slaughtering fish A22B 3/08)

25/003 . Processing cephalopods
25/006 . Hand tools for processing fish
25/02 . Washing or descaling fish
25/025 . Devices for washing or descaling fish by hand
25/04 . Sorting fish; Separating ice from fish packed in ice (investigating fish G01N 33/12)
25/06 . Work-tables; Fish-holding and auxiliary devices in connection with work-tables
25/08 . Holding, guiding, or conveying fish before, during or after its preparation (A22C 25/06 takes precedence); Devices for sizing fish; Automatically adapting conveyors or processing machines to the measured size (transport in general B65G)

25/10 . Devices for threading fish on strings or the like
25/12 . Arranging fish, e.g. according to the position of head and tail (orientating articles during conveying B65G 47/24)

25/14 . Beheading, eviscerating, or cleaning fish (combined with removing fish-bone, skinning and filleting A22C 25/14; hand tools A22C 25/006)
25/142 . Beheading fish
25/145 . Eviscerating fish
25/147 . Eviscerating by means of vacuum or suction devices
25/16 . Removing fish-bones; Filleting fish (combined with beheading, eviscerating A22C 25/14; hand tools A22C 25/006)
25/163 . Removing the fins
25/166 . Removing loose pin bones, e.g. from fish fillets
25/17 . Skinning fish
25/18 . Cutting fish into portions
25/185 . Hand tools for cutting fish
25/20 . Shredding; Cutting into cubes; Flaking
25/22 . Fish-rolling apparatus

29/00 Processing shellfish (or bivalves), e.g. oysters, lobsters; Devices therefor, e.g. claw locks, claw crushers, grading devices; Processing lines

29/005 . Grading or classifying shellfish or bivalves
29/002 . Processing shrimps, lobsters or the like (combined with removing fish-bone, skinning and filleting A22C 25/14; hand tools A22C 25/006)
29/001 . Cleaning operations on shellfish, e.g. evisceration, brushing
29/0022 . Devening shellfish
29/0023 . Conveying, feeding or aligning shellfish
29/0024 . Opening, shelling or peeling shellfish
29/0025 . Mechanically opening and shelling crabs, lobsters or other hard-shelled crustaceans
29/0026 . Mechanically peeling and shelling shrimps, prawns or other soft-shelled crustaceans
29/0027 . Hand tools for shelling shellfish
29/0028 . Beheading shellfish
29/004 . Processing bivalves, e.g. oysters (oyster knives with openers A47G 21/06)
29/0043 . Cleaning operations on bivalves, e.g. evisceration, brushing, separation of meat and shell material
29/0046 . Opening or shucking bivalves