

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

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| 5/00 | Apparatus for mixing meat, sausage-meat, or meat products (mixing in general B01F) | 11/006 | • {Separating linked sausages} |
| | | 11/008 | • {Conveying sausages in horizontal position (conveying hanging sausages A22C 15/001)} |
| 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)} | 11/02 | • Sausage filling or stuffing machines {(enclosing material in preformed tubular webs B65B 9/10)} |
| 7/0007 | • {specially adapted for making multi-layered meat products} | 11/0209 | • • {Stuffing horn assembly} |
| 7/0015 | • {specially adapted for making meat-balls} | 11/0218 | • • • {with multiple interchangeable stuffing horns, e.g. magazine arrangements} |
| 7/0023 | • {Pressing means} | 11/0227 | • • {Supplying casings to the stuffing device} |
| 7/003 | • • {Meat-moulds} | 11/0236 | • • • {from a storage device} |
| 7/0038 | • • • {Demoulding means} | 11/0245 | • • {Controlling devices} |
| 7/0046 | • • • {Containers in which meat is pressed and moulded} | 11/0254 | • • • {Sizing means} |
| 7/0053 | • • • • {Stackable containers} | 11/0263 | • • • {Braking means} |
| 7/0061 | • • • • {Containers for moulding and pressing ham} | 11/0272 | • • • {for casing depletion} |
| 7/0069 | • • • {Pressing and moulding by means of a drum} | 11/0281 | • • {for sausages having at least one flat end} |
| 7/0076 | • • • {Devices for making meat patties} | 11/029 | • • {with coating or lubricating means} |
| 7/0084 | • • • • {comprising a reciprocating plate} | 11/04 | • • with mechanically-operated piston moving to-and-fro |
| 7/0092 | • {with worms or other rotary mounted members (A22C 7/0007 takes precedence)} | 11/06 | • • with piston operated by liquid or gaseous means |
| 9/00 | Apparatus for tenderising meat, e.g. ham {(tenderising chemically A23L 13/00 , A23L 13/70)} | 11/08 | • • with pressing-worm or other rotary-mounted pressing-members |
| 9/001 | • {by injection} | 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 51/26)} |
| 9/002 | • {by electric treatment} | 2011/101 | • • {for pinching and twisting} |
| 9/004 | • {by massaging} | 2011/102 | • • • {and twisting in opposite directions} |
| 9/005 | • • {Tumblers and rotating drums for massaging meat in their interior} | 11/104 | • • {by means of shear or blade elements} |
| 9/007 | • {by beating} | 11/105 | • • • {The sheer or blade elements being displaceable parallel to the sausage string in order to create a narrow point free of meat} |
| 9/008 | • {by piercing} | 11/107 | • • {A string passing between two rotary members comprising dividing elements cooperating with each other} |
| 11/00 | Sausage making {(chemical aspects A23L 13/00); Apparatus for handling or conveying sausage products during manufacture } | 11/108 | • • {with dividing elements located on the surface of a single rotary member} |
| 11/001 | • {Machines for making skinless sausages, e.g. Frankfurters, Wieners} | 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)} |
| 11/003 | • • {Removing casings from sausages during manufacture} | 11/122 | • • {by forming knots} |
| 11/005 | • • {Apparatus for binding or tying sausages or meat, e.g. salami, rollades; Filling sausage products into sleeve netting} | 11/125 | • • {by clipping; Removal of clips} |

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| 11/127 | . . {Forming a suspension loop} | 15/00 | Apparatus for hanging-up meat or sausages {(filling and conveying sausage products during manufacture A22C 11/00 ; transport through slaughterhouses A22B 7/001 ; poultry shackles A22C 21/0007 ; conveying poultry A22C 21/0053)} |
| 13/00 | Sausage casings {(made of animal intestines A22C 17/14)} | 15/001 | . {Specially adapted for hanging or conveying several sausages or strips of meat} |
| 13/0003 | . {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)} | 15/002 | . . {Loops, hooks, cords for suspending single sausages; apparatus for making or conveying loops for sausages} |
| 13/0006 | . . {Apparatus for making artificial collagen casings (chemical aspects A22C 13/0016)} | 15/003 | . {Hooks or the like specially adapted for meat or hams or part of carcasses (spreaders for cattle A22B 5/06)} |
| 13/0009 | . {End closures therefor} | 15/005 | . . {Hangers with more hooks penetrating the piece of meat} |
| 13/0013 | . {Chemical composition of synthetic sausage casings} | 15/006 | . . {Apparatus for inserting a cord into a piece of meat} |
| 13/0016 | . . {based on proteins, e.g. collagen} | 15/007 | . {Racks for storing or smoking suspended meat or sausages (racks for pressing meat A22C 7/0023)} |
| 2013/002 | . {made by extrusion} | 15/008 | . {Cages specially adapted for suspending hams, meat or sausages} |
| 2013/0023 | . . {coextruded together with the food product} | 17/00 | Other devices for processing meat or bones |
| 13/0026 | . {Chemical treatment of natural gut} | 17/0006 | . {Cutting or shaping meat} |
| 2013/003 | . {with peeling aids, e.g. reducing adhesion between casing and product} | 17/0013 | . . {Boards or blocks for cutting or chopping meat} |
| 2013/0033 | . {with at least one layer of a fat impermeable material} | 17/002 | . {Producing portions of meat with predetermined characteristics, e.g. weight or particular dimensions} |
| 2013/0036 | . {with features allowing an easy opening and/or removal of the casing} | 17/0026 | . . {Mincing and grinding meat (mincing machines B02C 18/30)} |
| 2013/004 | . {with at least one layer of a gas, e.g. oxygen, water vapour, impermeable material} | 17/0033 | . . {Cutting slices out of a piece of meat (slicing machines B26D 1/143)} |
| 2013/0043 | . {with at least one layer of a water impermeable material} | 17/004 | . {Devices for deboning meat (deboning poultry A22C 21/0069 ; deboning operations on carcasses A22B 5/0035)} |
| 2013/0046 | . {suitable for impregnation with flavouring substances, e.g. caramel, liquid smoke, spices} | 17/0046 | . . {specially adapted for meat containing ribs} |
| 2013/005 | . {monolayer casings} | 17/0053 | . {by injection} |
| 2013/0053 | . {multilayer casings} | 17/006 | . {Putting meat on skewers} |
| 2013/0056 | . {nets and similar open structures to hold sausages and meat in general} | 17/0066 | . . {for "döner kebab", "shawarma", "gyros" or the like} |
| 2013/0059 | . {thermoplastic casings, casings with at least one layer of thermoplastic material} | 17/0073 | . {using visual recognition, X-rays, ultrasounds, or other contactless means to determine quality or size of portioned meat} |
| 2013/0063 | . {containing polyamide, e.g. nylon, aramide} | 17/008 | . . {for measuring quality, e.g. to determine further processing} |
| 2013/0066 | . {casings according to the presence or absence of seams} | 17/0086 | . . {Calculating cutting patterns based on visual recognition} |
| 2013/0069 | . . {seamed casings, casings with at least one longitudinal seam} | 17/0093 | . {Handling, transporting or packaging pieces of meat} |
| 2013/0073 | . . {seamless casings made out of a continuous seamless tubular sheet} | 17/02 | . Apparatus for holding meat or bones while cutting {(holding fish A22C 25/06 ; holding meat for carving A47J 43/18)} |
| 2013/0076 | . {treated in order to be conferred a rough appearance} | 17/04 | . Bone cleaning devices |
| 2013/0079 | . {printable sausage casings or sausage casings showing any kind of indicia} | 17/06 | . Bone-shears; Bone-crushers |
| 2013/0083 | . {biaxially oriented} | 17/08 | . Cleaning, e.g. washing, meat or sausages {(treating offal C11B)} |
| 2013/0086 | . {shrinkable casings} | 17/10 | . Marking meat or sausages {(marking animals A01K 11/00 ; labelling B65C)} |
| 2013/0089 | . {smokable casings, e.g. permeable to liquid smoke or phenol} | 17/12 | . Apparatus for cutting-off rind {(skinning instruments A22B 5/16)} |
| 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} | | |
| 13/023 | . . {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} | | |

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| 17/14 | <ul style="list-style-type: none"> 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 | 25/14 | <ul style="list-style-type: none"> Beheading, eviscerating, or cleaning fish {(combined with removing fish-bone, skinning and filleting A22C 25/14; hand tools A22C 25/006)} |
| 17/16 | <ul style="list-style-type: none"> Cleaning of intestines; Machines for removing fat or slime from intestines {(cleaning the stomach of slaughtered animals A22B 5/18)} | 25/142 | <ul style="list-style-type: none"> . . {Beheading fish} |
| 18/00 | Plants, factories, or the like for processing meat (for processing poultry only A22C 21/00 ; for processing fish only A22C 25/00) | 25/145 | <ul style="list-style-type: none"> . . {Eviscerating fish} |
| 21/00 | Processing poultry | 25/147 | <ul style="list-style-type: none"> . . . {Eviscerating by means of vacuum or suction devices} |
| 21/0007 | <ul style="list-style-type: none"> {Poultry shackles} | 25/16 | <ul style="list-style-type: none"> Removing fish-bones; Filleting fish {(combined with beheading, eviscerating A22C 25/14; hand tools A22C 25/006)} |
| 21/0015 | <ul style="list-style-type: none"> {Killing poultry entering the processing machine (slaughtering pliers, slaughtering shears A22B 3/08)} | 25/163 | <ul style="list-style-type: none"> . . {Removing the fins} |
| 21/0023 | <ul style="list-style-type: none"> . {Dividing poultry} | 25/166 | <ul style="list-style-type: none"> . . {Removing loose pin bones, e.g. from fish fillets} |
| 21/003 | <ul style="list-style-type: none"> . . {Filleting poultry, i.e. extracting, cutting or shaping poultry fillets} | 25/17 | <ul style="list-style-type: none"> Skinner fish |
| 21/0038 | <ul style="list-style-type: none"> . {Trussing poultry} | 25/18 | <ul style="list-style-type: none"> Cutting fish into portions |
| 21/0046 | <ul style="list-style-type: none"> . {Support devices} | 25/185 | <ul style="list-style-type: none"> . . {Hand tools for cutting fish} |
| 21/0053 | <ul style="list-style-type: none"> . {Transferring or conveying devices for poultry} | 25/20 | <ul style="list-style-type: none"> Shredding; Cutting into cubes; Flaking |
| 21/0061 | <ul style="list-style-type: none"> . {Cleaning or disinfecting poultry} | 25/22 | <ul style="list-style-type: none"> Fish-rolling apparatus |
| 21/0069 | <ul style="list-style-type: none"> . {Deboning poultry or parts of poultry} | 29/00 | Processing shellfish {or bivalves}, e.g. oysters, lobsters; {Devices therefor, e.g. claw locks, claw crushers, grading devices; Processing lines} |
| 21/0076 | <ul style="list-style-type: none"> . . {Deboning poultry legs and drumsticks} | 29/005 | <ul style="list-style-type: none"> . {Grading or classifying shellfish or bivalves} |
| 21/0084 | <ul style="list-style-type: none"> . . {Deboning poultry wings} | 29/02 | <ul style="list-style-type: none"> Processing shrimps, lobsters or the like {; Methods or machines for the shelling of shellfish} |
| 21/0092 | <ul style="list-style-type: none"> . {Skinning poultry or parts of poultry} | 29/021 | <ul style="list-style-type: none"> . . {Cleaning operations on shellfish, e.g. evisceration, brushing} |
| 21/02 | <ul style="list-style-type: none"> Plucking mechanisms for poultry | 29/022 | <ul style="list-style-type: none"> . . . {Deveining shellfish} |
| 21/022 | <ul style="list-style-type: none"> . . {with fingers} | 29/023 | <ul style="list-style-type: none"> . . {Conveying, feeding or aligning shellfish} |
| 21/024 | <ul style="list-style-type: none"> . . {Hand tools for plucking poultry} | 29/024 | <ul style="list-style-type: none"> . . {Opening, shelling or peeling shellfish} |
| 21/026 | <ul style="list-style-type: none"> . . {with rollers} | 29/025 | <ul style="list-style-type: none"> . . . {Mechanically opening and shelling crabs, lobsters or other hard-shelled crustaceans} |
| 21/028 | <ul style="list-style-type: none"> . . {with discs} | 29/026 | <ul style="list-style-type: none"> . . . {Mechanically peeling and shelling shrimps, prawns or other soft-shelled crustaceans} |
| 21/04 | <ul style="list-style-type: none"> Scalding, singeing, waxing, or dewaxing poultry | 29/027 | <ul style="list-style-type: none"> . . . {Hand tools for shelling shellfish} |
| 21/06 | <ul style="list-style-type: none"> Eviscerating devices for poultry | 29/028 | <ul style="list-style-type: none"> . {Beheading shellfish} |
| 21/063 | <ul style="list-style-type: none"> . . {Hand tools for eviscerating poultry} | 29/04 | <ul style="list-style-type: none"> Processing bivalves, e.g. oysters (oyster knives with openers A47G 21/06) |
| 21/066 | <ul style="list-style-type: none"> . . {Extracting or removing the tendons from the legs of poultry} | 29/043 | <ul style="list-style-type: none"> . . {Cleaning operations on bivalves, e.g. evisceration, brushing, separation of meat and shell material} |
| Processing fish, including shellfish | | 29/046 | <ul style="list-style-type: none"> . . {Opening or shucking bivalves} |
| 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 | <ul style="list-style-type: none"> . {Processing cephalopods} | | |
| 25/006 | <ul style="list-style-type: none"> . {Hand tools for processing fish} | | |
| 25/02 | <ul style="list-style-type: none"> Washing or descaling fish | | |
| 25/025 | <ul style="list-style-type: none"> . . {Devices for washing or descaling fish by hand} | | |
| 25/04 | <ul style="list-style-type: none"> Sorting fish; Separating ice from fish packed in ice {(investigating fish G01N 33/12)} | | |
| 25/06 | <ul style="list-style-type: none"> Work-tables; Fish-holding and auxiliary devices in connection with work-tables | | |
| 25/08 | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> Devices for threading fish on strings or the like | | |
| 25/12 | <ul style="list-style-type: none"> Arranging fish, e.g. according to the position of head and tail {(orientating articles during conveying B65G 47/24)} | | |