

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](#))

Relationships with other classification places

Preserving foodstuffs [A23B](#)

Fish, meat or poultry preparations [A23L](#)

Disintegrating, e.g. chopping meat [B02C 18/00](#)

References

Limiting references

This place does not cover:

Obtaining protein compositions for foodstuffs	A23J 1/00
Preparation of proteins	C07K 1/00

A22C 5/00

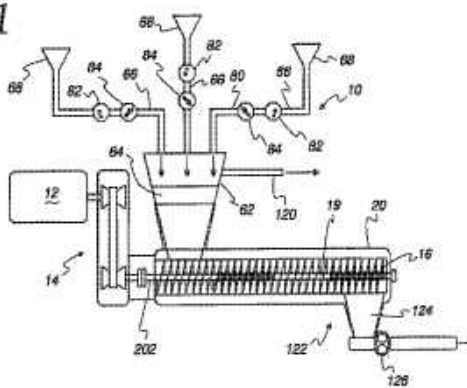
Apparatus for mixing meat, sausage-meat, or meat products (mixing in general [B01F](#))

Definition statement

This place covers:

Meat mixers meant for obtaining a meat mixture for its further processing

Fig. 1



EP2189068

Relationships with other classification places

Mixing in general [B01F](#)

A22C 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](#)}

Definition statement

This place covers:

Apparatuses for pressing and moulding meat.

Relationships with other classification places

Presses [B30B](#)

Shaping or working of foodstuffs [A23P](#)

References

Limiting references

This place does not cover:

Ham boilers	A47J 27/20
Meat patty moulding devices for domestic use	A47J 43/20

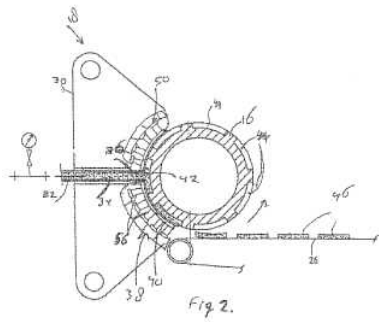
Informative references

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

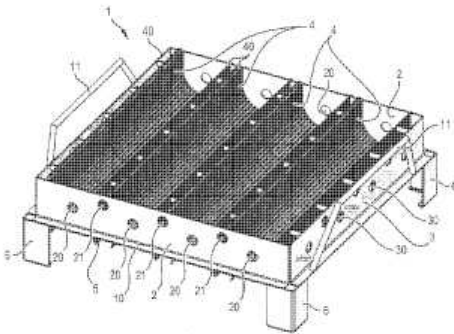
Packaging meat	B65B 25/065
Stackable polygonal containers	B65D 5/001

Special rules of classification

- apparatuses for making multi-layered meat products [A22C 7/0007](#)
- for making meat balls [A22C 7/0015](#)
- pressing means [A22C 7/0023](#): including containers in which meat is pressed, containers for shaping and boiling ham, stackable containers as well as demoulding means
- apparatuses with worms or other rotary mounted members [A22C 7/0092](#)



WO2010110655



FR2933573

A22C 9/00

Apparatus for tenderising meat, e.g. ham {(tenderising chemically [A23L 13/00](#), [A23L 13/70](#))}

Definition statement

This place covers:

For treating, tenderising or flavouring meat.

References

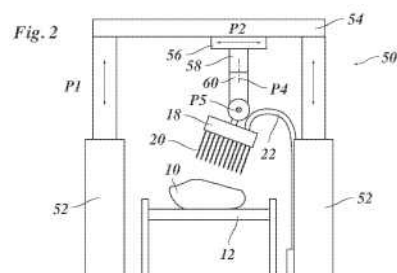
Limiting references

This place does not cover:

Processing meat by injection	A22C 17/0053
Tenderising chemically	A23L 13/00
Tenderised or flavoured meat pieces e.g. by injecting	A23L 13/70

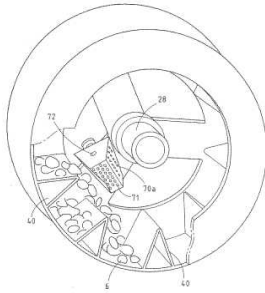
Special rules of classification

- by injection [A22C 9/001](#)



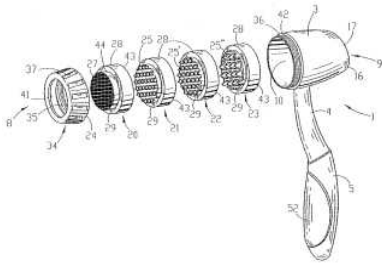
WO2010069772

- by electric treatment [A22C 9/002](#)
- by massaging, e.g. with rotating drums or tumblers [A22C 9/004](#)



US2008051020

- by beating [A22C 9/007](#)



US2006019589

- by piercing [A22C 9/008](#)

A22C 11/00

Sausage making {(chemical aspects [A23L 13/00](#)); Apparatus for handling or conveying sausage products during manufacture}

Definition statement

This place covers:

All machinery and processes related to sausage manufacturing

References

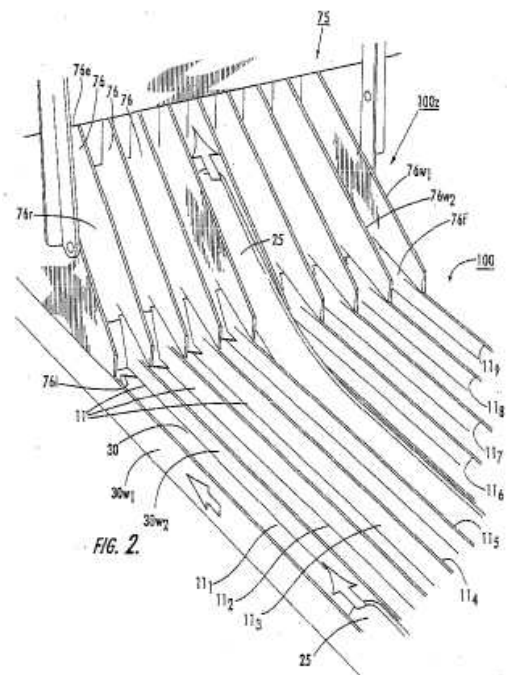
Limiting references

This place does not cover:

Conveying hanging sausages	A22C 15/001
Chemical aspects of sausage making	A23L 13/00

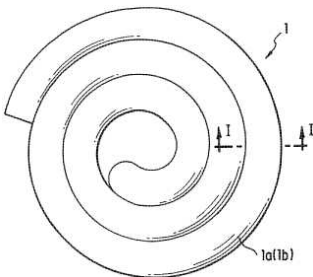
Special rules of classification

- Conveying sausages in a horizontal position



US2007080047

- Manufacturing sausages with a predetermined shape



US6187362

A22C 11/001

{Machines for making skinless sausages, e.g. Frankfurters, Wieners}

Definition statement

This place covers:

Machines for making skinless sausages

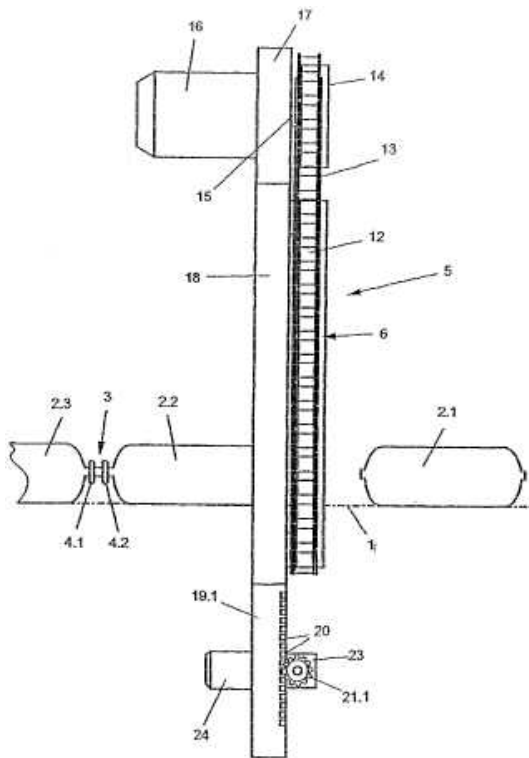
Special rules of classification

- removing casings from sausages during manufacture [A22C 11/003](#)
- netting sausages and meat [A22C 11/005](#)

A22C 11/006**{Separating linked sausages}****Definition statement**

This place covers:

Dividing a continuous strand of sausages into portions



US2003032385

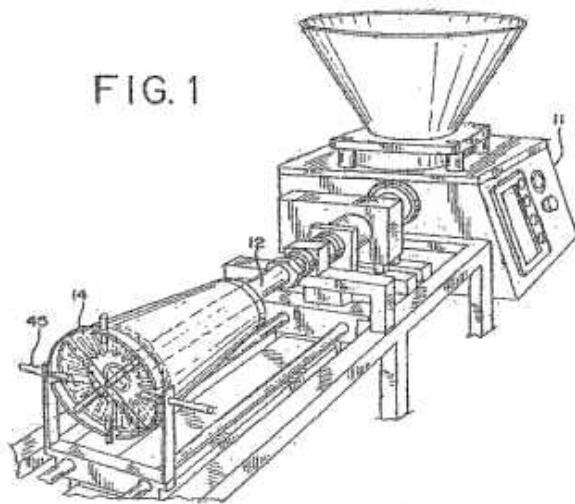
A22C 11/02**Sausage filling or stuffing machines {(enclosing material in preformed tubular webs [B65B 9/10](#))}****Definition statement**

This place covers:

Sausage filling or stuffing machines, parts thereof.

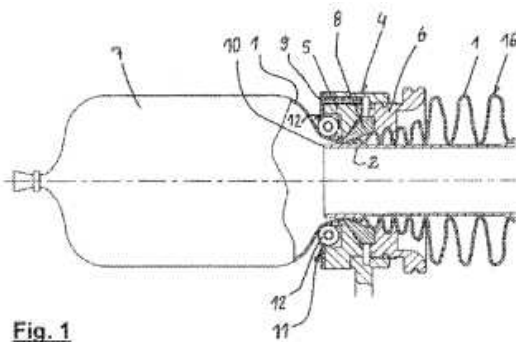
Special rules of classification

- Stuffing horn assemblies, including devices with multiple interchangeable stuffing horns (e.g. magazine arrangements) [A22C 11/0209](#)



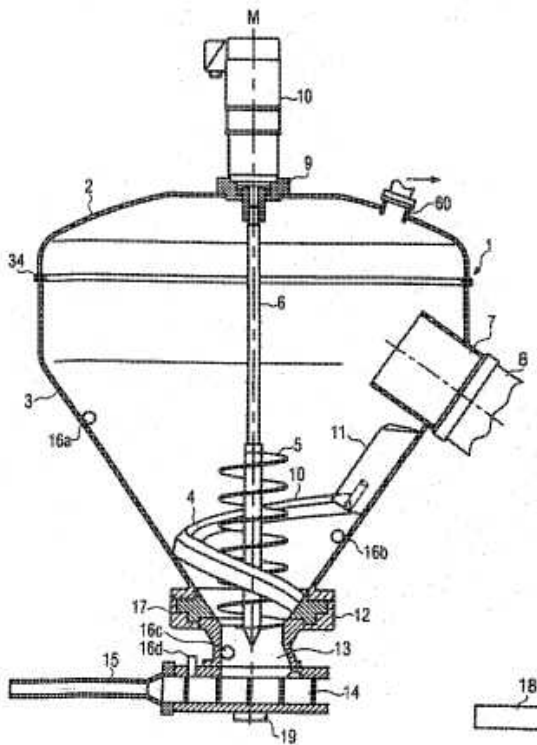
EP1726211

- Supplying casings to the stuffing device [A22C 11/0227](#)
- Controlling devices for the stuffing process: sizing and braking means as well as means for detecting casing depletion



EP2215911

- Making sausages with at least one flat end [A22C 11/0281](#)
- Stuffing devices with coating or lubricating means [A22C 11/029](#)
- With a mechanical or hydraulic piston for pushing the stuffing material [A22C 11/04](#) and [A22C 11/06](#)
- the stuffing material being pushed by a rotary pressing member [A22C 11/08](#)



US2007212994

A22C 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](#))}

Definition statement

This place covers:

Subdividing a continuous tubular sausage casing into a strand of linked individual sausages.

References

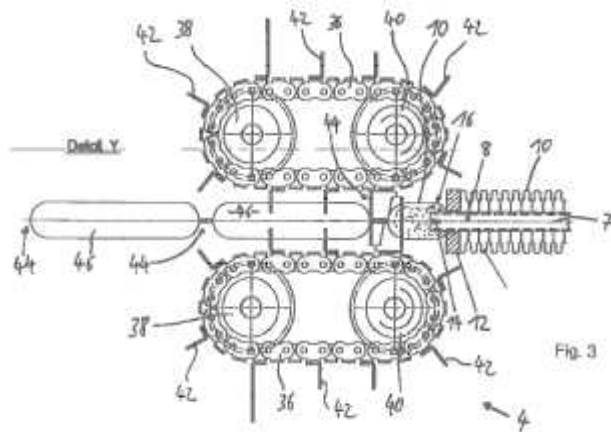
Limiting references

This place does not cover:

Subdividing filled tubes by sealing or securing	B65B 9/12
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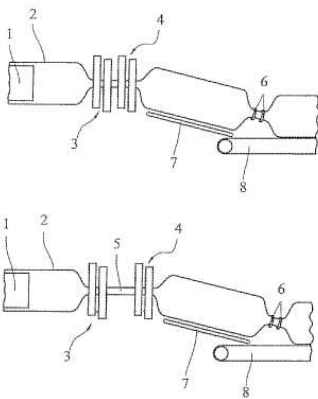
Special rules of classification

- Apparatuses with two rotary members comprising dividing elements which cooperate with each other



EP1095569

- Apparatuses dividing the sausage string by means of shear or blade elements, also with displacing movement that creates a narrow point free of meat in the links



WO2007000301

A22C 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](#))}

Definition statement

This place covers:

Apparatuses for tying or clipping the links between individual sausages in a continuous sausage strand

References

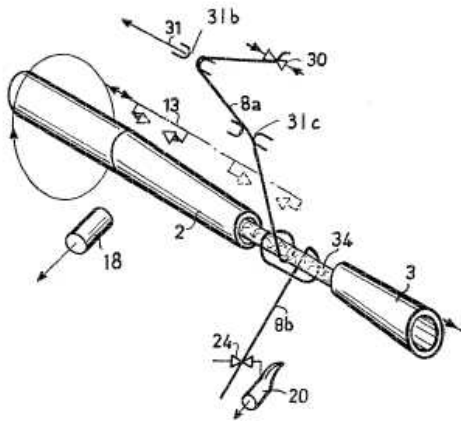
Limiting references

This place does not cover:

Stapling machines	B27F 7/17
Applying clips to close bag necks	B65B 51/04 , B65B 51/08
Metal clips and staples	B65D 33/1641

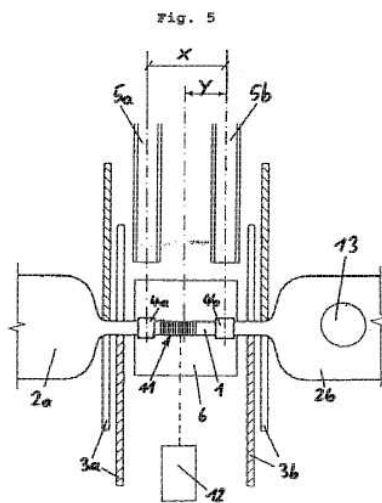
Special rules of classification

- by means of tying, forming knots



US4188053

- by means of clipping, also including means for the removal of the clips



EP1095570

- creating a suspension loop

A22C 13/00

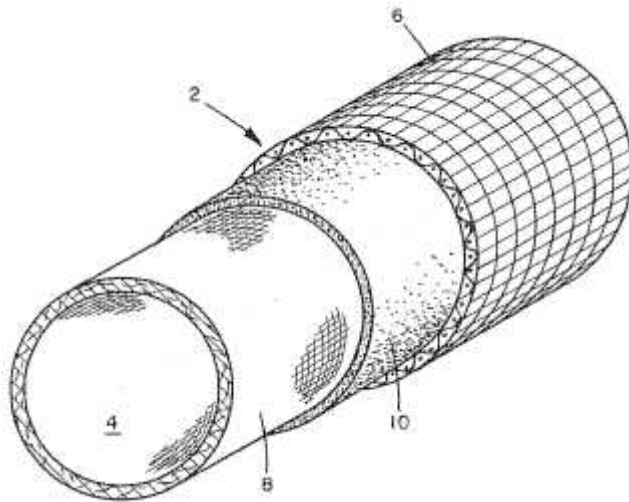
Sausage casings {(made of animal intestines [A22C 17/14](#))}

Definition statement

This place covers:

Sausage casings and their manufacturing:

- apparatus for making sausage casings
- chemical composition of sausage casings
- Chemical treatment of natural gut
- Shirring of sausage casings



US2004253398

References

Limiting references

This place does not cover:

Made of animal intestines	A22C 17/14
Protein compositions for foodstuffs	A23J
Devices for treating the surfaces of sheets, webs, etc. in connection with printing	B41F 23/00
Packaging foodstuff	B65D 81/34

Informative references

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

Layered products	B32B
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A22C 2013/0056

{nets and similar open structures to hold sausages and meat in general}

References

Informative references

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

Filling sausage products into sleeve netting	A22C 11/005
Making nets by knotting of filamentary material	D04G

A22C 2013/0079**{printable sausage casings or sausage casings showing any kind of indicia}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Dying or printing textiles	D06P
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A22C 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](#))}****Definition statement***This place covers:*

Means for hanging-up meat or sausages for transportation or for storage

References**Limiting references***This place does not cover:*

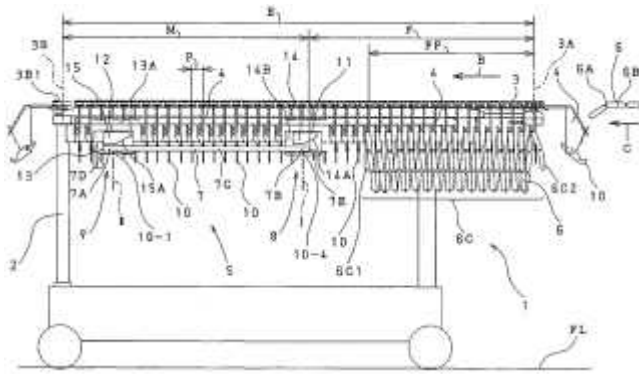
Horizontal conveying of sausages	A22C 11/00
Poultry shackles	A22C 21/0007
Conveying poultry	A22C 21/0053
Spreaders for cattle	A22B 5/06
Transport within slaughterhouses	A22B 7/001
Hooks and gambrels for slaughterhouses	A22B 7/001

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

Devices for transferring articles between conveyors	B65G 47/61
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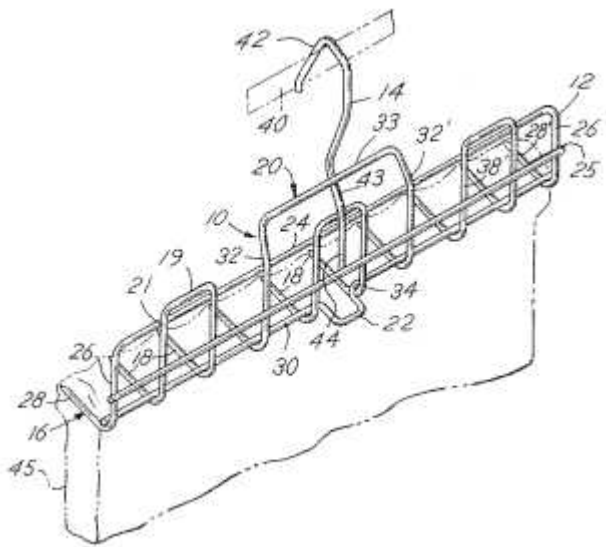
Special rules of classification

- Adapted for hanging or conveying several sausages or strips of meat (e.g. for suspending sausages from a stick) [A22C 15/001](#)



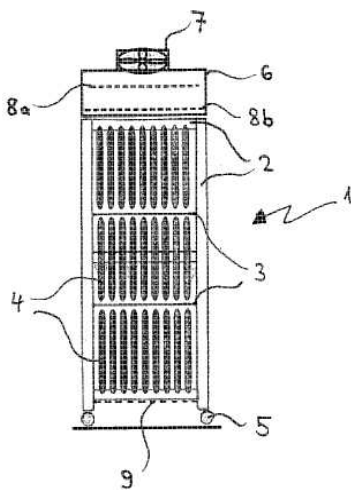
US2003096568

- Hooks for meat or hams (e.g. with hooks or cords penetrating the piece of meat, bacon hangers) [A22C 15/003](#)



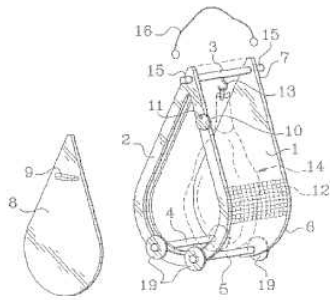
US5938522

- Racks for storing or smoking suspended meat [A22C 15/007](#)



DE102007048481

- Cages for suspending hams, meat or sausages [A22C 15/008](#)



FR2828067

A22C 17/00

Other devices for processing meat or bones

References

Limiting references

This place does not cover:

Holding fish while processing	A22C 25/06
Marking animals	A01K 11/00
Skinning instruments for animal carcasses	A22B 5/16
Cleaning the stomach of slaughtered animals	A22B 5/18
Holding meat for carving	A47J 43/18
Packaging specially shaped pieces of meat	B65B 25/06
Packaging slices of meat, poultry or fish	B65B 25/06
Labelling	B65C
Treating offal	C11B
Splitting intestines	C14B 21/00

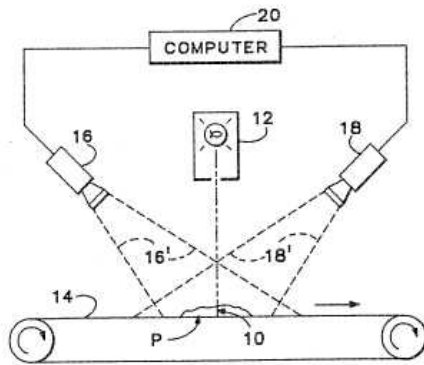
Informative references

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

Collecting or arranging articles in groups	B07C 5/38
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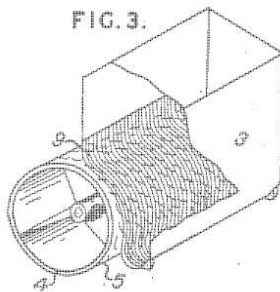
Special rules of classification

- Cutting or shaping meat [A22C 17/0006](#)
- Deboning meat [A22C 17/004](#)
- Processing meat by injection [A22C 17/0053](#)
- Putting meat on skewers [A22C 17/006](#)
- Using visual recognition, X-rays, ultrasounds, or other contactless means to determine quality or size of a portion of meat [A22C 17/0073](#)



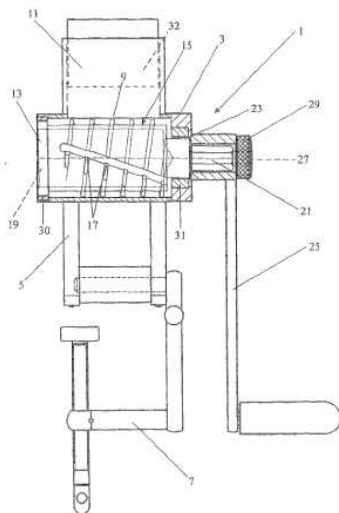
US5324228

- Handling, transporting or packaging, pieces of meat [A22C 17/0093](#)
- Holding meat or bones during cutting [A22C 17/02](#)
- Bone cleaning devices, separating meat from bone [A22C 17/04](#)



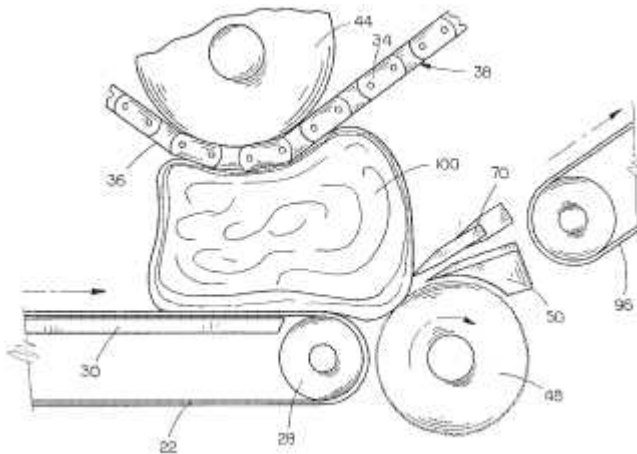
GB874786

- Bone shears, bone crushers, bone milling machines [A22C 17/06](#)



WO9834491

- Cleaning, washing meat or sausages [A22C 17/08](#)
- Marking meat or sausages [A22C 17/10](#)
- Apparatus for cutting off rind, removing fat from meat cuts [A22C 17/12](#)



US2003008607

- Working-up of animal intestines, apparatus for cutting intestines or pulling intestines to pieces. Sausage casings made of animal intestines [A22C 17/14](#)
- Cleaning intestines, removing fat or slime from intestines [A22C 17/16](#)

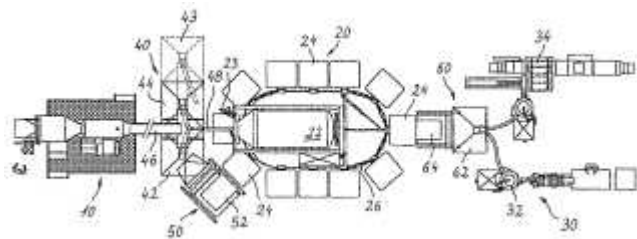
A22C 18/00

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

Definition statement

This place covers:

Complete integral processes for processing meat and plants for their implementation



US7077057

References

Limiting references

This place does not cover:

Processing poultry	A22C 21/00
Processing fish	A22C 25/00

A22C 21/00

Processing poultry

Definition statement

This place covers:

All types of machinery and operations performed specifically on poultry:

References

Limiting references

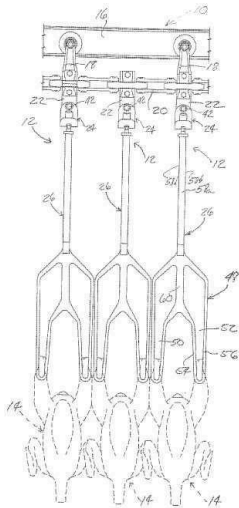
This place does not cover:

Killing poultry	A22B 3/086
Eviscerating carcasses	A22B 5/0005
Deboning carcasses in general	A22B 5/0035
Slaughterhouse gambrels and hooks	A22B 7/001

Special rules of classification

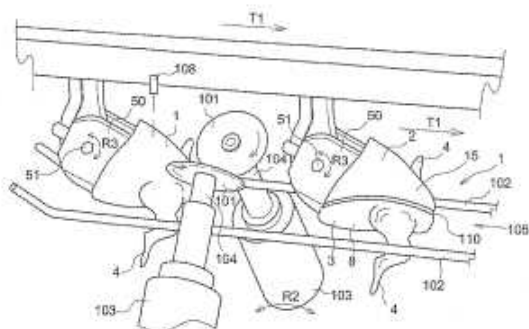
Class [A22C 21/0015](#) is redundant with class [A22B 3/086](#). Both classes are envisaged to merge together.

- poultry shackles for holding and suspending poultry while it is conveyed along the process line of a slaughterhouse [A22C 21/0007](#)



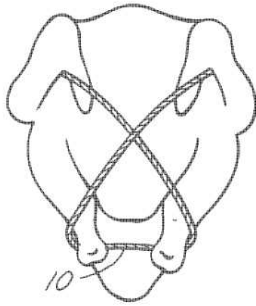
US2003124965

- Killing poultry entering the processing machine: slaughtering devices integrated in the processing line, which are part of a continuous process [A22C 21/0015](#)
- Cutting and dividing operations on poultry [A22C 21/0023](#), filleting, extracting, cutting or shaping poultry fillets [A22C 21/003](#)



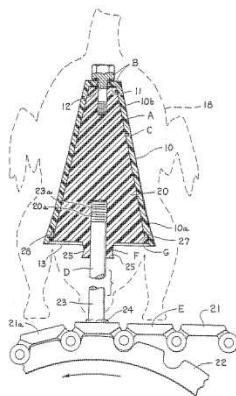
WO2007067052

- Trussing poultry [A22C 21/0038](#), making poultry keep its shape for being further processed (e.g. for being cooked evenly)



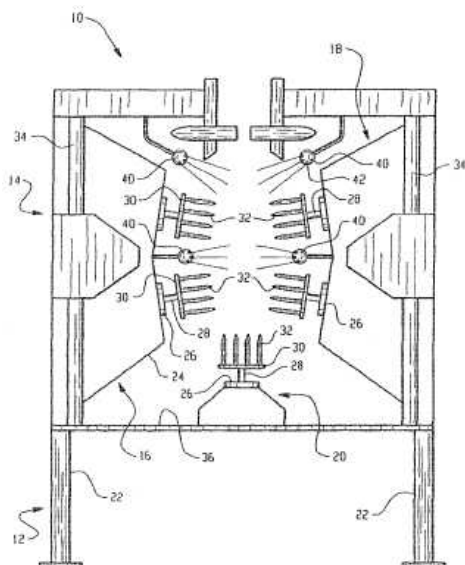
US5816905

- Support devices for poultry [A22C 21/0046](#)



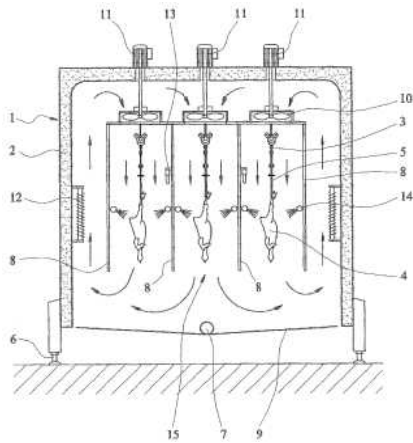
US4716624

- Transferring or conveying devices for poultry [A22C 21/0053](#)
- Cleaning or disinfecting poultry [A22C 21/0061](#)
- Deboning poultry [A22C 21/0069](#)
- Skinning poultry [A22C 21/0092](#) - Plucking mechanisms for poultry [A22C 21/02](#), defeathering poultry



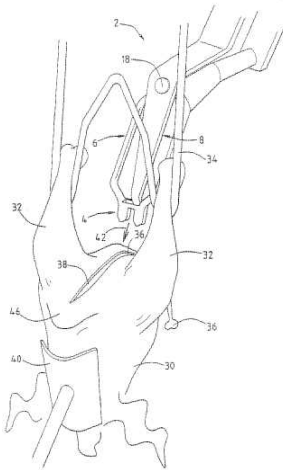
US2004147211

- Scalding, singeing, waxing, or dewaxing poultry [A22C 21/04](#)



EP1460902

- Eviscerating poultry [A22C 21/06](#): Hand tools, removing tendons



WO0152659

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Trussing	tying and/or restraining a poultry carcass with twine, cord or other elements so that it can be further processed (e.g. in order to facilitate packaging or enable even cooking)
Plucking	pulling the feathers from a bird's carcass

A22C 25/00

Processing fish {; Curing of fish; Stunning of fish by electric current; Investigating fish by optical means (slaughtering fish [A22B 3/08](#))}

Definition statement

This place covers:

All types of machinery and operation performed specifically on fish, also processing cephalopods (octopus, squid, cuttlefish...):

References

Limiting references

This place does not cover:

Cutting or shaping meat	A22C 17/0006
Slaughtering fish	A22B 3/083
Fish powder, agglomerates or flakes	A23L 17/10
Investigating fish	G01N 33/12

Informative references

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

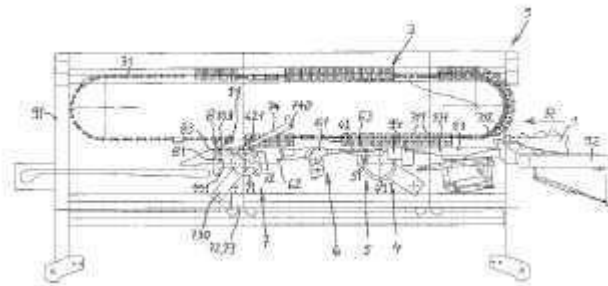
Orientating articles during conveying	A23J 1/00
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Special rules of classification

Classes [A22C 25/14](#) and [A22C 25/14](#) may result redundant. It is envisaged to merge them both.

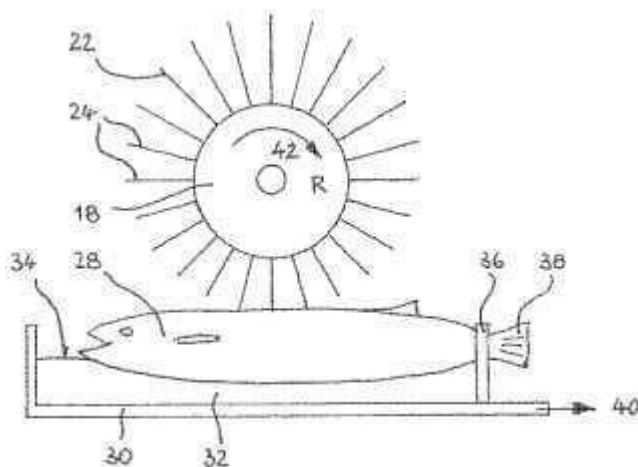
- Beheading, cleaning and eviscerating fish combined with removing fishbones, skinning and filleting [A22C 25/14](#) . Hand tools therefor

[A22C 25/006](#)



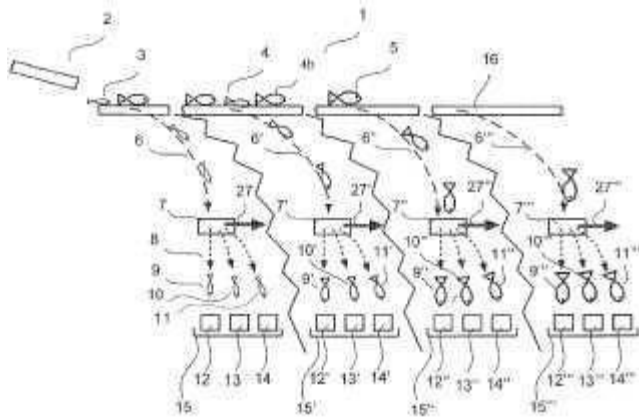
DE10341941

- Washing or descaling fish [A22C 25/02](#). Hand tools therefor [A22C 25/025](#)



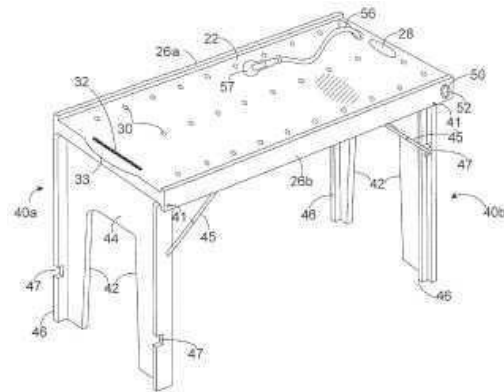
DE10045971

- Sorting fish [A22C 25/04](#). Grading fish, separating fish from ice.



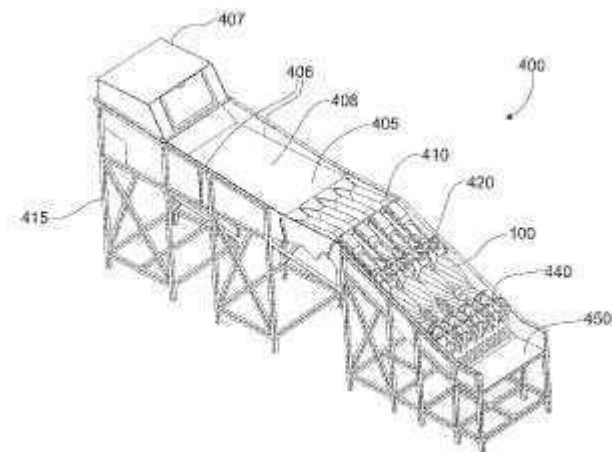
EP1458500

- Work tables, fish holding devices [A22C 25/06](#), supports for working on fish



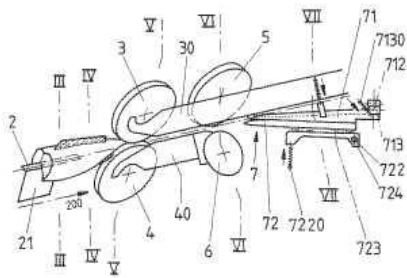
US2011048288

- Conveying fish. Holding and guiding fish while being conveyed [A22C 25/08](#). Adapting conveyors to the size of fish.



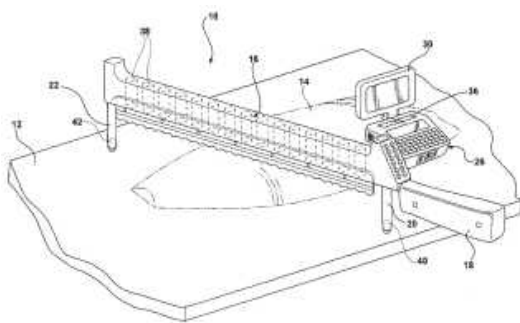
GB2449203

- Threading fish on strings [A22C 25/10](#)
- Arranging fish according to the position of head and tail [A22C 25/12](#)
- Beheading, eviscerating, or cleaning fish [A22C 25/14](#). Not in combination with skinning, deboning or filleting. Also including evisceration by means of suction and extracting roe from fish
- Removing fish bones, filleting fish [A22C 25/16](#), removing fins [A22C 25/163](#), removing pinbones from fish fillets.



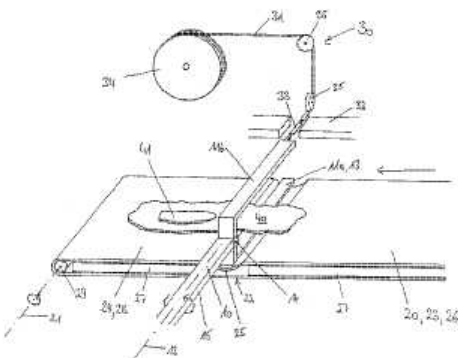
WO0203807

- Skinning fish [A22C 25/17](#)
- Cutting fish into portions [A22C 25/18](#). Hand tools therefor [A22C 25/185](#)



US2006155509

- Shredding, cutting fish into cubes, flaking [A22C 25/20](#), obtaining fish pulp.
- Fish rolling apparatus [A22C 25/22](#)



DE102009019558

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Roe	the mass of eggs contained in the ovaries of a female fish or shellfish, especially when ripe and used as food
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A22C 29/00

Processing shellfish {or bivalves}, e.g. oysters, lobsters; {Devices therefor, e.g. claw locks, claw crushers, grading devices; Processing lines}

Definition statement

This place covers:

Processing shellfish, bivalves, hard-shelled molluscs and crustaceans

References

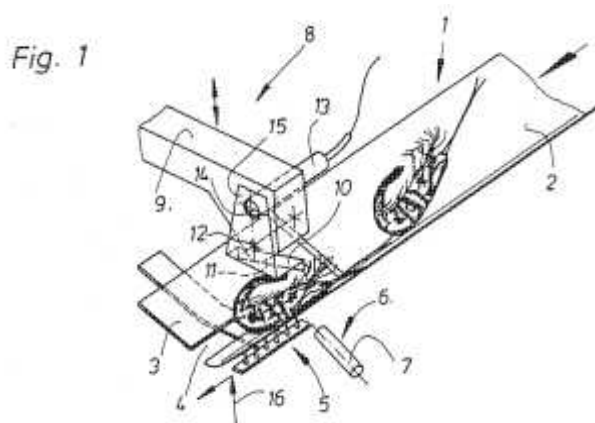
Limiting references

This place does not cover:

Processing cephalopods	A22C 25/00
Shellfish preparations	A23L 17/40
Oyster knives with openers	A47G 21/06

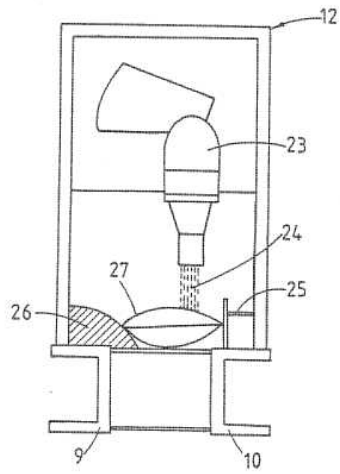
Special rules of classification

- Processing crustaceans [A22C 29/02](#), grading, beheading, conveying, deveining shrimps and prawns, shelling and peeling crustaceans. Hand tools therefor [A22C 29/027](#) .



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- Processing molluscs [A22C 29/02](#), grading, cleaning, shucking, and/or opening hard-shelled molluscs, whether bivalve or not.



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