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:

<table>
<thead>
<tr>
<th>Ham boilers</th>
<th>A47J 27/20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat patty moulding devices for domestic use</td>
<td>A47J 43/20</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Packaging meat</th>
<th>B65B 25/065</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stackable polygonal containers</td>
<td>B65D 5/001</td>
</tr>
</tbody>
</table>

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
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:

<table>
<thead>
<tr>
<th>Processing meat by injection</th>
<th>A22C 17/0053</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenderising chemically</td>
<td>A23L 13/00</td>
</tr>
<tr>
<td>Tenderised or flavoured meat pieces e.g. by injecting</td>
<td>A23L 13/70</td>
</tr>
</tbody>
</table>

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

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 \texttt{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 \texttt{A22C 11/0281}
- Stuffing devices with coating or lubricating means \texttt{A22C 11/029}
- With a mechanical or hydraulic piston for pushing the stuffing material \texttt{A22C 11/04} and \texttt{A22C 11/06}
- the stuffing material being pushed by a rotary pressing member \texttt{A22C 11/08}
Apparatus for twisting {or linking} sausages {(subdividing filled flexible tubes to form packages, involving displacement of contents \textbf{B65B 9/12}, by applying pressure and heat successively \textbf{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 | \textbf{B65B 9/12} |

Special rules of classification

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

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

- 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
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       |

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
Hooks and gambrels for slaughterhouses

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

Devices for transferring articles between conveyors

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

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

• Racks for storing or smoking suspended meat A22C 15/007
• Cages for suspending hams, meat or sausages A22C 15/008

A22C 17/00
Other devices for processing meat or bones

References

Limiting references

This place does not cover:

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

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 potion of meat [A22C 17/0073](#)

![Diagram](image)

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](#)

![Diagram](image)

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

![Image](US7077057)

**References**

**Limiting references**

*This place does not cover:*

<table>
<thead>
<tr>
<th>Processing poultry</th>
<th>A22C 21/00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processing fish</td>
<td>A22C 25/00</td>
</tr>
</tbody>
</table>

**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:*

<table>
<thead>
<tr>
<th>Killing poultry</th>
<th>A22B 3/086</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eviscerating carcasses</td>
<td>A22B 5/0005</td>
</tr>
<tr>
<td>Deboning carcasses in general</td>
<td>A22B 5/0035</td>
</tr>
<tr>
<td>Slaughterhouse gambrels and hooks</td>
<td>A22B 7/001</td>
</tr>
</tbody>
</table>

**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:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trussing</td>
<td>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)</td>
</tr>
<tr>
<td>Plucking</td>
<td>pulling the feathers from a bird's carcass</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Reference</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cutting or shaping meat</td>
<td>A22C 17/0006</td>
</tr>
<tr>
<td>Slaughtering fish</td>
<td>A22B 3/083</td>
</tr>
<tr>
<td>Fish powder, agglomerates or flakes</td>
<td>A23L 17/10</td>
</tr>
<tr>
<td>Investigating fish</td>
<td>G01N 33/12</td>
</tr>
</tbody>
</table>
Informative references

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

<table>
<thead>
<tr>
<th>Orientating articles during conveying</th>
<th>A23J 1/00</th>
</tr>
</thead>
</table>

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:*

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roe</td>
<td>the mass of eggs contained in the ovaries of a female fish or shellfish, especially when ripe and used as food</td>
</tr>
</tbody>
</table>
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.

GB2197179

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