

# CPC COOPERATIVE PATENT CLASSIFICATION

## A HUMAN NECESSITIES

### FOODSTUFFS; TOBACCO

#### A23 FOODS OR FOODSTUFFS; TREATMENT THEREOF, NOT COVERED BY OTHER CLASSES

(NOTE omitted)

#### A23N MACHINES OR APPARATUS FOR TREATING HARVESTED FRUIT, VEGETABLES OR FLOWER BULBS IN BULK, NOT OTHERWISE PROVIDED FOR; PEELING VEGETABLES OR FRUIT IN BULK; APPARATUS FOR PREPARING ANIMAL FEEDING-STUFFS (machines for cutting straw or fodder [A01F 29/00](#); disintegrating, e.g. shredding, [B02C](#); severing, e.g. cutting, splitting, slicing [B26B](#), [B26D](#))

##### 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.

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| <p><b>1/00</b> <b>Machines or apparatus for extracting juice</b> (preparation of non-alcoholic beverages, e.g. by adding ingredients to fruit or vegetable juices, <a href="#">A23L 2/00</a>; apparatus for making beverages <a href="#">A47J 31/00</a> {; centrifuges <a href="#">B04B</a>}; extracting presses <a href="#">B30B</a>)</p> <p>1/003 . {especially for citrus fruits}</p> <p>1/006 . {by electropasmolysis (preserving of fruit or vegetables by electropasmolytic treatment <a href="#">A23B 7/015</a>)}</p> <p>1/02 . combined with disintegrating or cutting</p> <p><b>3/00</b> <b>Machines for coring or stoning fruit, characterised by their feeding device</b> (<a href="#">A23N 4/00</a> takes precedence {; kitchen devices for stoning fruit <a href="#">A47J 25/00</a>})</p> <p>3/02 . with feeder-drums</p> <p>3/04 . with endless feeder-belts</p> <p>3/06 . with feeder-tables</p> <p><b>4/00</b> <b>Machines for stoning fruit or removing seed-containing sections from fruit, characterised by their stoning or removing device</b> (for peeling fruit and removing seed-containing sections <a href="#">A23N 7/08</a>; domestic devices for stoning fruit <a href="#">A47J 23/00</a>, for coring fruit <a href="#">A47J 25/00</a>)</p> <p>4/02 . for stoning fruit</p> <p>4/04 . . for peaches, plums, apricots or the like</p> <p>4/06 . . for cherries or the like (<a href="#">A23N 4/04</a> takes precedence)</p> <p>4/08 . . for dates, olives or the like oblong fruits</p> <p>4/085 . . . {for olives}</p> <p>4/10 . . for fruit with very small pips, e.g. raisins</p> <p>4/12 . . for coring fruit {(for household appliances <a href="#">B26B</a>)}</p> <p>4/14 . . for apples, pears or the like</p> <p>4/16 . . for tomatoes or the like</p> <p>4/18 . . for citrus fruits</p> <p>4/20 . . for pineapples</p> <p>4/22 . for both splitting and stoning</p> | <p>4/24 . for removing seed-containing sections from cut fruit {(material in <a href="#">A23N 4/12</a>)}</p> <p><b>5/00</b> <b>Machines for hulling, husking or cracking nuts</b> {(household nutcrackers <a href="#">A47J 43/26</a>)}</p> <p>5/002 . {for skinning nut kernels}</p> <p>5/004 . {for palmnuts (<a href="#">A23N 5/002</a> and <a href="#">A23N 5/08</a> take precedence)}</p> <p>5/006 . {for chestnuts (<a href="#">A23N 5/002</a> and <a href="#">A23N 5/08</a> take precedence)}</p> <p>5/008 . {for almonds (<a href="#">A23N 5/002</a> and <a href="#">A23N 5/08</a> take precedence)}</p> <p>5/01 . for peanuts</p> <p>5/03 . for coconuts (<a href="#">A23N 5/08</a> takes precedence)</p> <p>5/08 . for removing fleshy or fibrous hulls of nuts (for peanuts <a href="#">A23N 5/01</a>)</p> <p><b>7/00</b> <b>Peeling vegetables or fruit</b> (devices for skinning onions <a href="#">A23N 15/08</a>; {peeling by non-mechanical means <a href="#">A23P</a>}; peeling machines of the household type <a href="#">A47J 17/00</a>)</p> <p>7/002 . {Peeling pinaeapples (<a href="#">A23N 7/005</a> and <a href="#">A23N 7/01</a> take precedence)}</p> <p>7/005 . {Peeling with steam}</p> <p>2007/007 . {Brush rollers for peeling fruit or vegetables}</p> <p>7/01 . using chemical substances, e.g. lye</p> <p>7/02 . Peeling potatoes, apples or similarly shaped vegetables or fruit ({<a href="#">A23N 7/005</a> and} <a href="#">A23N 7/01</a> take precedence)</p> <p>7/023 . . {one by one}</p> <p>7/026 . . . {Peeling machines therefor with rotary fruit holding spindles and fixed or movable peeler blades}</p> <p>7/04 . Peeling asparagus ({<a href="#">A23N 7/005</a> and} <a href="#">A23N 7/01</a> take precedence)</p> <p>7/08 . for peeling fruit and removing seed-containing sections</p> <p>7/10 . Driving mechanisms</p> <p><b>11/00</b> <b>Removing pith from stems</b></p> |
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- 12/00** **Machines for cleaning, blanching, drying or roasting fruits or vegetables, e.g. coffee, cocoa, nuts** (methods for treating, e.g. roasting, coffee or cocoa, [A23F](#), [A23G](#); cleaning, e.g. washing, or drying grain [B02B 1/00](#); separating solids from solids for cleaning [B07B](#); cleaning in general [B08B](#); heating devices *per se*, see the relevant classes, e.g. [F24](#); drying machines in general [F26B](#))
- 12/005 . {for dry-cleaning}
  - 12/02 . for washing or blanching ([A23N 12/06](#) takes precedence; blanching methods [A23B 7/06](#))
  - 12/023 . . {for washing potatoes, apples or similarly shaped vegetables or fruit ([washing grain B02B 1/04](#))}
  - 12/026 . . . {Stone-gatherers or cleaning devices for the washing machines}
  - 12/04 . . for blanching
  - 12/06 . for washing or blanching, combined with subsequent drying
  - 12/08 . for drying or roasting ([A23N 12/06](#) takes precedence)
  - 12/083 . . {with stirring, vibrating or grinding devices}
  - 12/086 . . {with centrifuging devices}
  - 12/10 . . Rotary roasters
  - 12/12 . . Auxiliary devices for roasting machines
  - 12/125 . . . {Accessories or details}
- 15/00** **Machines or apparatus for other treatment of fruits or vegetables for human purposes; Machines or apparatus for topping or skinning flower bulbs** {(treatment of coffee, other than drying or roasting [A23F](#); treatment of cocoa [A23G 1/02](#))}
- 15/001 . {for trimming artichokes}
  - 15/003 . {for trimming cauliflowers, broccoli or cabbages}
  - 15/005 . {for pricking peas or beans}
  - 2015/006 . {Singularising cherries or other clustered fruit and vegetables}
  - 2015/008 . {Sorting of fruit and vegetables}
  - 15/01 . for stripping Brussels' sprouts from stalks
  - 15/02 . for stemming, piercing, or stripping fruit {(for household appliances [A47J 21/00](#))}; Removing sprouts of potatoes
  - 15/025 . . {for stemming grapes}
  - 15/04 . Devices for topping fruit or vegetables ([topping onions A23N 15/08](#))
  - 15/045 . . {Devices for topping mushrooms}
  - 15/06 . Devices for other treatment of fruit, e.g. marking, maturing, polishing
  - 15/08 . Devices for topping or skinning onions or flower bulbs
  - 15/10 . for shelling peas or beans
  - 15/12 . for snipping or stringing beans
- 17/00** **Apparatus specially adapted for preparing animal feeding-stuffs** {(automatic devices for the distribution of liquid fodder for stock or game [A01K 5/0216](#); sucking apparatus for young stock [A01K 9/00](#))}
- 17/001 . {by treating with chemicals, e.g. ammoniac, sodium hydroxide ([processes A23K 10/32](#))}
  - 17/002 . {for treating of meat, fish waste or the like}
  - 17/004 . {for treating by application of heat, e.g. by means of potato cookers ([drying F26B](#))}
  - 17/005 . {for shaping by moulding, extrusion, pressing, e.g. pellet-mills ([processes A23K 40/00](#); presses in general [B30B](#))}
  - 17/007 . {for mixing feeding-stuff components}
- 17/008 . {for treating of silage, e.g. upgrading with water}
  - 17/02 . Fodder mashers (household implements for mashing potatoes or other foodstuffs [A47J 19/04](#))