

CPC COOPERATIVE PATENT CLASSIFICATION

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](#))

1/00	Machines or apparatus for extracting juice (preparation of non-alcoholic beverages, e.g. by adding ingredients to fruit or vegetable juices, A23L 2/00 ; apparatus for making beverages A47J 31/00 {centrifuges B04B }; extracting presses B30B)	5/08	• for removing fleshy or fibrous hulls of nuts (for peanuts A23N 5/01)
1/003	• {especially for citrus fruits}	7/00	Peeling vegetables or fruit (devices for skinning onions A23N 15/08 ; {peeling by non-mechanical means A23P }; peeling machines of the household type A47J 17/00)
1/006	• {by electropasmolysis (preserving of fruit or vegetables by electropasmolytic treatment A23B 7/015)}	7/002	• {Peeling pineapples (A23N 7/005 and A23N 7/01 take precedence)}
1/02	• combined with disintegrating or cutting	7/005	• {Peeling with steam}
3/00	Machines for coring or stoning fruit, characterised by their feeding device (A23N 4/00 takes precedence; {kitchen devices for stoning fruit A47J 25/00 })	2007/007	• {Brush rollers for peeling fruit or vegetables}
3/02	• with feeder-drums	7/01	• using chemical substances, e.g. lye
3/04	• with endless feeder-belts	7/02	• Peeling potatoes, apples or similarly shaped vegetables or fruit ({ A23N 7/005 and} A23N 7/01 take precedence)
3/06	• with feeder-tables	7/023	• . . {one by one}
4/00	Machines for stoning fruit or removing seed-containing sections from fruit, characterised by their stoning or removing device (for peeling fruit and removing seed-containing sections A23N 7/08 ; domestic devices for stoning fruit A47J 23/00 , for coring fruit A47J 25/00)	7/026	• . . . {Peeling machines therefor with rotary fruit holding spindles and fixed or movable peeler blades}
4/02	• for stoning fruit	7/04	• Peeling asparagus ({ A23N 7/005 and} A23N 7/01 take precedence)
4/04	• . . for peaches, plums, apricots or the like	7/08	• for peeling fruit and removing seed-containing sections
4/06	• . . for cherries or the like (A23N 4/04 takes precedence)	7/10	• Driving mechanisms
4/08	• . . for dates, olives or the like oblong fruits	11/00	Removing pith from stems
4/085	• . . . {for olives}	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)
4/10	• . . for fruit with very small pips, e.g. raisins	12/005	• {for dry-cleaning}
4/12	• for coring fruit ({for household appliances B26B })	12/02	• for washing or blanching (A23N 12/06 takes precedence; blanching methods A23B 7/06)
4/14	• . . for apples, pears or the like	12/023	• . . {for washing potatoes, apples or similarly shaped vegetables or fruit (washing grain B02B 1/04)}
4/16	• . . for tomatoes or the like	12/026	• . . . {Stone-gatherers or cleaning devices for the washing machines}
4/18	• . . for citrus fruits	12/04	• . . for blanching
4/20	• . . for pineapples	12/06	• for washing or blanching, combined with subsequent drying
4/22	• for both splitting and stoning	12/08	• for drying or roasting (A23N 12/06 takes precedence)
4/24	• for removing seed-containing sections from cut fruit {(material in A23N 4/12)}	12/083	• . . {with stirring, vibrating or grinding devices}
5/00	Machines for hulling, husking or cracking nuts {(household nutcrackers A47J 43/26)}	12/086	• . . {with centrifuging devices}
5/002	• {for skinning nut kernels}	12/10	• . . Rotary roasters
5/004	• {for palmnuts (A23N 5/002 and A23N 5/08 take precedence)}	12/12	• . . Auxiliary devices for roasting machines
5/006	• {for chestnuts (A23N 5/002 and A23N 5/08 take precedence)}	12/125	• . . . {Accessories or details}
5/008	• {for almonds (A23N 5/002 and A23N 5/08 take precedence)}		
5/01	• for peanuts		
5/03	• for coconuts (A23N 5/08 takes precedence)		

- 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](#))