

# CPC COOPERATIVE PATENT CLASSIFICATION

## A HUMAN NECESSITIES

### FOODSTUFFS; TOBACCO

#### A23 FOODS OR FOODSTUFFS; THEIR TREATMENT, 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.

- |       |   |          |   |
|-------|---|----------|---|
| 1/00  | <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> )                | 4/24     | <ul style="list-style-type: none"> <li>• for removing seed-containing sections from cut fruit {(material in <a href="#">A23N 4/12</a>)}</li> </ul>  |
| 1/003 | <ul style="list-style-type: none"> <li>• {especially for citrus fruits}</li> </ul>  | 5/00     | <b>Machines for hulling, husking or cracking nuts</b> {(household nutcrackers <a href="#">A47J 43/26</a> )}   |
| 1/006 | <ul style="list-style-type: none"> <li>• {by electropasmolysis (preserving of fruit or vegetables by electropasmolytic treatment <a href="#">A23B 7/015</a>)}</li> </ul>  | 5/002    | <ul style="list-style-type: none"> <li>• {for skinning nut kernels}</li> </ul>  |
| 1/02  | <ul style="list-style-type: none"> <li>• combined with disintegrating or cutting</li> </ul>   | 5/004    | <ul style="list-style-type: none"> <li>• {for palmnuts (<a href="#">A23N 5/002</a> and <a href="#">A23N 5/08</a> take precedence)}</li> </ul>   |
| 3/00  | <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> })  | 5/006    | <ul style="list-style-type: none"> <li>• {for chestnuts (<a href="#">A23N 5/002</a> and <a href="#">A23N 5/08</a> take precedence)}</li> </ul>  |
| 3/02  | <ul style="list-style-type: none"> <li>• with feeder-drums</li> </ul>   | 5/008    | <ul style="list-style-type: none"> <li>• {for almonds (<a href="#">A23N 5/002</a> and <a href="#">A23N 5/08</a> take precedence)}</li> </ul>  |
| 3/04  | <ul style="list-style-type: none"> <li>• with endless feeder-belts</li> </ul>   | 5/01     | <ul style="list-style-type: none"> <li>• for peanuts</li> </ul>   |
| 3/06  | <ul style="list-style-type: none"> <li>• with feeder-tables</li> </ul>  | 5/03     | <ul style="list-style-type: none"> <li>• for coconuts (<a href="#">A23N 5/08</a> takes precedence)</li> </ul>   |
| 4/00  | <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> ) | 5/08     | <ul style="list-style-type: none"> <li>• for removing fleshy or fibrous hulls of nuts (for peanuts <a href="#">A23N 5/01</a>)</li> </ul>  |
| 4/02  | <ul style="list-style-type: none"> <li>• for stoning fruit</li> </ul>   | 7/00     | <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> ) |
| 4/04  | <ul style="list-style-type: none"> <li>• . for peaches, plums, apricots or the like</li> </ul>  | 7/002    | <ul style="list-style-type: none"> <li>• {Peeling pinaeapples (<a href="#">A23N 7/005</a> and <a href="#">A23N 7/01</a> take precedence)}</li> </ul>  |
| 4/06  | <ul style="list-style-type: none"> <li>• . for cherries or the like (<a href="#">A23N 4/04</a> takes precedence)</li> </ul>   | 7/005    | <ul style="list-style-type: none"> <li>• {Peeling with steam}</li> </ul>  |
| 4/08  | <ul style="list-style-type: none"> <li>• . for dates, olives or the like oblong fruits</li> </ul>   | 2007/007 | <ul style="list-style-type: none"> <li>• {Brush rollers for peeling fruit or vegetables}</li> </ul>   |
| 4/085 | <ul style="list-style-type: none"> <li>• . . {for olives}</li> </ul>  | 7/01     | <ul style="list-style-type: none"> <li>• using chemical substances, e.g. lye</li> </ul>   |
| 4/10  | <ul style="list-style-type: none"> <li>• . for fruit with very small pips, e.g. raisins</li> </ul>  | 7/02     | <ul style="list-style-type: none"> <li>• Peeling potatoes, apples or similarly shaped vegetables or fruit ({<a href="#">A23N 7/005</a> and} <a href="#">A23N 7/01</a> take precedence)</li> </ul>                         |
| 4/12  | <ul style="list-style-type: none"> <li>• for coring fruit {(for household appliances <a href="#">B26B</a>)}</li> </ul>  | 7/023    | <ul style="list-style-type: none"> <li>• . {one by one}</li> </ul>  |
| 4/14  | <ul style="list-style-type: none"> <li>• . for apples, pears or the like</li> </ul>   | 7/026    | <ul style="list-style-type: none"> <li>• . . {Peeling machines therefor with rotary fruit holding spindles and fixed or movable peeler blades}</li> </ul>   |
| 4/16  | <ul style="list-style-type: none"> <li>• . for tomatoes or the like</li> </ul>  | 7/04     | <ul style="list-style-type: none"> <li>• Peeling asparagus ({<a href="#">A23N 7/005</a> and} <a href="#">A23N 7/01</a> take precedence)</li> </ul>  |
| 4/18  | <ul style="list-style-type: none"> <li>• . for citrus fruits</li> </ul>   | 7/08     | <ul style="list-style-type: none"> <li>• for peeling fruit and removing seed-containing sections</li> </ul>   |
| 4/20  | <ul style="list-style-type: none"> <li>• . for pineapples</li> </ul>  | 7/10     | <ul style="list-style-type: none"> <li>• Driving mechanisms</li> </ul>  |
| 4/22  | <ul style="list-style-type: none"> <li>• for both splitting and stoning</li> </ul>  | 11/00    | <b>Removing pith from stems</b>   |

<b>12/00</b>	<b>Machines for cleaning, blanching, drying or roasting fruits or vegetables, e.g. coffee, cocoa, nuts</b> (methods for treating, e.g. roasting, coffee or cocoa, <a href="#">A23F</a> , <a href="#">A23G</a> ; cleaning, e.g. washing, or drying grain <a href="#">B02B 1/00</a> ; separating solids from solids for cleaning <a href="#">B07B</a> ; cleaning in general <a href="#">B08B</a> ; heating devices <i>per se</i> , <i>see the relevant classes</i> , e.g. <a href="#">F24</a> ; drying machines in general <a href="#">F26B</a> )	17/008	• {for treating of silage, e.g. upgrading with water}
		17/02	• Fodder mashers (household implements for mashing potatoes or other foodstuffs <a href="#">A47J 19/04</a> )
12/005	• {for dry-cleaning}		
12/02	• for washing or blanching ( <a href="#">A23N 12/06</a> takes precedence; blanching methods <a href="#">A23B 7/06</a> )		
12/023	• . {for washing potatoes, apples or similarly shaped vegetables or fruit (washing grain <a href="#">B02B 1/04</a> )}		
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 ( <a href="#">A23N 12/06</a> 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}		
<b>15/00</b>	<b>Machines or apparatus for other treatment of fruits or vegetables for human purposes; Machines or apparatus for topping or skinning flower bulbs</b> {(treatment of coffee, other than drying or roasting <a href="#">A23F</a> ; treatment of cocoa <a href="#">A23G 1/02</a> )}		
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 <a href="#">A47J 21/00</a> )}; Removing sprouts of potatoes		
15/025	• . {for stemming grapes}		
15/04	• Devices for topping fruit or vegetables (topping onions <a href="#">A23N 15/08</a> )		
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		
<b>17/00</b>	<b>Apparatus specially adapted for preparing animal feeding-stuffs</b> {(automatic devices for the distribution of liquid fodder for stock or game <a href="#">A01K 5/0216</a> ; sucking apparatus for young stock <a href="#">A01K 9/00</a> )}		
17/001	• {by treating with chemicals, e.g. ammoniac, sodium hydroxide (processes <a href="#">A23K 10/32</a> )}		
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 <a href="#">F26B</a> )}		
17/005	• {for shaping by moulding, extrusion, pressing, e.g. pellet-mills (processes <a href="#">A23K 40/00</a> ; presses in general <a href="#">B30B</a> )}		
17/007	• {for mixing feeding-stuff components}		