

# CPC COOPERATIVE PATENT CLASSIFICATION

## B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

### SHAPING

## B26 HAND CUTTING TOOLS; CUTTING; SEVERING

**B26D CUTTING; DETAILS COMMON TO MACHINES FOR PERFORATING, PUNCHING, CUTTING-OUT, STAMPING-OUT OR SEVERING** (soil-working [A01B](#); for growing crops or plants [A01D](#), [A01G](#); for fodder or straw [A01F](#); for bulk butter [A01J](#); for dough [A21C](#); slaughtering [A22B](#); for tobacco, cigars or cigarettes [A24](#); marking-out, perforating or making buttonholes [A41H 25/00](#); manufacturing footwear [A43D](#); brushmaking [A46D](#); surgery [A61B](#); disintegrating, mincing or shredding in general [B02C](#); cutting wire, making pins or nails [B21F](#), [B21G](#); of the kind used for metal [B23](#); cutting by abrasive fluid jets [B24C 5/02](#); hand-held cutting tools [B26B](#); perforating, cutting-out, stamping-out or punching, or severing by means other than cutting [B26F](#); for wood [B27](#); for stone [B28D](#); working of plastics or substances in a plastic state [B29](#); making boxes, cartons, envelopes or bags, of paper or similarly worked materials, e.g. metal foil, [B31B](#); article or web delivery apparatus incorporating cutting or line-perforating devices [B65H 35/00](#); for leather or upholstery [B68](#); [C14B](#); for glass [C03B](#); making matches [C06F](#); for peat [C10F](#); for sugar [C13B 45/00](#); for textile materials [D06H](#); civil engineering, building, mining, see Section E; for light guides [G02B 6/25](#); cutting processed photographic material [G03D 15/04](#))

### NOTES

- This subclass covers:
  - cutting non-metallic sheet material and metal foil in general;
  - cutting other forms of non-metallic material not otherwise provided for;
  - features specific to machines for cutting, perforating, punching, cutting-out, stamping-out and severing by means other than cutting, which relate to a requirement or problem of a nature which is not peculiar to a machine for these purposes, that is, details of or arrangements for operating or controlling such machines, although the realisation of such features may differ according to the kind of machine concerned. This subclass covers such features in general even if the feature in any particular case is to some extent peculiar to, or is claimed only for, a machine designed for perforating, punching, cutting-out, stamping-out, or for severing other than by cutting.
- If the details or arrangements have no essential features specific to cutting, perforating, punching, cutting-out, stamping-out or severing machines, the more general classes, e.g. [F16](#), take precedence.
- In this subclass, in groups [B26D 5/00](#) and [B26D 7/00](#), the following term is used with the meaning indicated:
  - "cutting" includes cutting-out, stamping-out, punching, perforating, and severing by means other than cutting.

### 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.

|             |                                                                                                                                                                                                          |           |                                                                                    |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------|
| <b>1/00</b> | <b>Cutting through work characterised by the nature or movement of the cutting member {or particular materials not otherwise provided for}; Apparatus or machines therefor; Cutting members therefor</b> | 2001/0046 | . . {rotating continuously about an axis perpendicular to the edge}                |
|             |                                                                                                                                                                                                          | 2001/0053 | . . {having a special cutting edge section or blade section}                       |
| 1/0006      | . {Cutting members therefor}                                                                                                                                                                             | 2001/006  | . . {the cutting blade having a special shape, e.g. a special outline, serrations} |
| 2001/0013   | . . {consisting of a reciprocating or endless band}                                                                                                                                                      | 2001/0066 | . . {having shearing means, e.g. shearing blades, abutting blades}                 |
| 2001/002    | . . {Materials or surface treatments therefor, e.g. composite materials}                                                                                                                                 | 2001/0073 | . . {having the form of a three dimensional spiral}                                |
| 2001/0026   | . . . {fiber reinforced materials}                                                                                                                                                                       | 2001/008  | . . {in the form of wires}                                                         |
| 2001/0033   | . . {assembled from multiple blades}                                                                                                                                                                     | 2001/0086 | . . {having a radiused blunt cutting edge}                                         |
| 2001/004    | . . {not rotating}                                                                                                                                                                                       |           |                                                                                    |

|           |                                                                                                                                                          |       |                                                                                                                                                         |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2001/0093 | . . {circular cutting discs with a radiused blunt cutting edge}                                                                                          | 1/185 | . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                      |
| 1/01      | . involving a cutting member which does not travel with the work                                                                                         | 1/20  | . . . . coacting with a fixed member                                                                                                                    |
| 1/015     | . . {for thin material, e.g. for sheets, strips or the like}                                                                                             | 1/205 | . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                      |
| 1/02      | . . having a stationary cutting member ( <a href="#">B26D 1/547 takes precedence</a> )                                                                   | 1/22  | . . . . coacting with a movable member, e.g. a roller ( <a href="#">B26D 1/24 takes precedence</a> )                                                    |
| 1/025     | . . . {for thin material, e.g. for sheets, strips or the like}                                                                                           | 1/225 | . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                      |
| 1/03      | . . . with a plurality of cutting members                                                                                                                | 1/24  | . . . . coacting with another disc cutter                                                                                                               |
| 1/035     | . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                         | 1/245 | . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                      |
| 1/04      | . . having a linearly-movable cutting member ( <a href="#">B26D 1/46</a> , <a href="#">B26D 1/547 take precedence</a> )                                  | 1/25  | . . . with a non-circular cutting member                                                                                                                |
| 1/045     | . . . {for thin material, e.g. for sheets, strips or the like}                                                                                           | 1/255 | . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                        |
| 1/06      | . . . wherein the cutting member reciprocates ( <a href="#">cup or like cutting members B26D 1/44</a> )                                                  | 1/26  | . . . . moving about an axis substantially perpendicular to the line of cut                                                                             |
| 1/065     | . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                         | 1/265 | . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                      |
| 1/08      | . . . . of the guillotine type                                                                                                                           | 1/28  | . . . . . and rotating continuously in one direction during cutting                                                                                     |
| 1/085     | . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                       | 1/285 | . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                      |
| 1/09      | . . . . . with a plurality of cutting members                                                                                                            | 1/29  | . . . . . with cutting member mounted in the plane of a rotating disc, e.g. for slicing beans                                                           |
| 1/095     | . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                       | 1/295 | . . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                    |
| 1/10      | . . . . in, or substantially in, a direction parallel to the cutting edge                                                                                | 1/30  | . . . . . with limited pivotal movement to effect cut                                                                                                   |
| 1/105     | . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                       | 1/305 | . . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                    |
| 1/11      | . . . . . with a plurality of cutting members                                                                                                            | 1/34  | . . . . moving about an axis parallel to the line of cut                                                                                                |
| 1/115     | . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                       | 1/345 | . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                      |
| 1/12      | . . having a cutting member moving about an axis ( <a href="#">B26D 1/547 takes precedence</a> ; <a href="#">cup or like cutting members B26D 1/44</a> ) | 1/36  | . . . . . and rotating continuously in one direction during cutting, e.g. mounted on a rotary cylinder ( <a href="#">for flying cutting B26D 1/62</a> ) |
| 1/125     | . . . {for thin material, e.g. for sheets, strips or the like}                                                                                           | 1/365 | . . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                    |
| 1/14      | . . . with a circular cutting member, e.g. disc cutter                                                                                                   | 1/38  | . . . . . and coacting with a fixed blade or other fixed member                                                                                         |
| 1/141     | . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                         | 1/385 | . . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                    |
| 1/143     | . . . . rotating about a stationary axis ( <a href="#">B26D 1/20 - B26D 1/24 take precedence</a> )                                                       | 1/40  | . . . . . and coacting with a rotary member                                                                                                             |
| 1/1435    | . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                       | 1/405 | . . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                    |
| 1/147     | . . . . . with horizontal cutting member                                                                                                                 | 1/42  | . . . . . and slidably mounted in a rotary member                                                                                                       |
| 1/1475    | . . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                     | 1/425 | . . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                    |
| 1/15      | . . . . . with vertical cutting member                                                                                                                   | 1/43  | . . . . moving about another axis, e.g. mounted on the surface of a cone or curved body                                                                 |
| 1/151     | . . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                     | 1/435 | . . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                    |
| 1/153     | . . . . . with inclined cutting member                                                                                                                   | 1/44  | . . having a cup or like cutting member                                                                                                                 |
| 1/1535    | . . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                     | 1/445 | . . . {for thin material, e.g. for sheets, strips or the like}                                                                                          |
| 1/157     | . . . . rotating about a movable axis ( <a href="#">B26D 1/20 - B26D 1/24 take precedence</a> )                                                          | 1/45  | . . having a cutting member the movement of which is not covered by any preceding group                                                                 |
| 1/1575    | . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                       | 1/455 | . . . {for thin material, e.g. for sheets, strips or the like}                                                                                          |
| 1/16      | . . . . . mounted on a movable arm or the like                                                                                                           | 1/46  | . . having an endless band-knife or the like                                                                                                            |
| 1/165     | . . . . . . {for thin material, e.g. for sheets, strips or the like}                                                                                     |       |                                                                                                                                                         |
| 1/18      | . . . . . mounted on a movable carriage                                                                                                                  |       |                                                                                                                                                         |

- 1/465 . . . {for thin material, e.g. for sheets, strips or the like}
- 1/48 . . . with tensioning means
- 1/485 . . . . {for thin material, e.g. for sheets, strips or the like}
- 1/50 . . . with a plurality of band-knives or the like
- 1/505 . . . . {for thin material, e.g. for sheets, strips or the like}
- 1/52 . . . . having adjustable spacing between knives
- 1/525 . . . . . {for thin material, e.g. for sheets, strips or the like}
- 1/54 . . . Guides for band-knives or the like
- 1/543 . . . . {for thin material, e.g. for sheets, strips or the like}
- 1/547 . . having a wire-like cutting member ([endless wire B26D 1/46](#); [severing using a heated wire B26F 3/12](#))
- 1/5475 . . . {for thin material, e.g. for sheets, strips or the like}
- 1/553 . . . with a plurality of wire-like cutting members
- 1/5535 . . . . {for thin material, e.g. for sheets, strips or the like}
- 1/56 . involving a cutting member which travels with the work {otherwise than in the direction of the cut}, i.e. flying cutter ([flying shears for metal B23D 25/00](#); [flying saws for metal B23D 45/18](#))
- 1/565 . . {for thin material, e.g. for sheets, strips or the like}
- 1/58 . . and is mounted on a movable arm or the like {(for [metal B23D 25/06](#))}
- 1/585 . . . {for thin material, e.g. for sheets, strips or the like}
- 1/60 . . and is mounted on a movable carriage
- 1/605 . . . {for thin material, e.g. for sheets, strips or the like}
- 1/62 . . and is rotating about an axis parallel to the line of cut, e.g. mounted on a rotary cylinder
- 2001/623 . . . {for selecting different knife sets by shifting the angle of the rotary cylinder}
- 1/626 . . . {for thin material, e.g. for sheets, strips or the like}
- 3/00 Cutting work characterised by the nature of the cut made; Apparatus therefor**
- 3/001 . {Cutting tubes longitudinally}
- 3/003 . {specially adapted for cutting rubber}
- 3/005 . . {for cutting used tyres}
- 3/006 . {specially adapted for cutting blocs of plastic material}
- 3/008 . . {by sliding}
- 3/02 . Bevelling
- 3/06 . Grooving involving removal of material from the surface of the work
- 3/065 . . {On sheet material}
- 3/08 . Making a superficial cut in the surface of the work without removal of material, e.g. scoring, incising
- 3/085 . . {On sheet material}
- 3/10 . Making cuts of other than simple rectilinear form ([cutting-out B26F](#))
- 3/11 . . to obtain pieces of spiral or helical form
- 3/12 . Slitting marginal portions of the work, i.e. forming cuts, without removal of material, at an angle, e.g. a right angle, to the edge of the work
- 3/14 . Forming notches in marginal portion of work by cutting ([by punching B26F 1/12](#))
- 3/16 . Cutting rods or tubes transversely {(cutting tubes longitudinally [B26D 3/001](#))}
- NOTE**
- [B26D 3/161](#) takes precedence over groups [B26D 3/162](#) - [B26D 3/168](#)
- 3/161 . . {for obtaining more than one product at a time}
- 3/162 . . {cutting tubes obliquely}
- 3/163 . . {Cutting tubes from the inside}
- 3/164 . . {characterised by means for supporting the tube from the inside}
- 3/165 . . . {by fluid under pressure}
- 3/166 . . {Trimming tube-ends}
- 3/167 . . {Cutting tubes having a non-circular cross-section}
- 3/168 . . . {flattened tubes}
- 3/169 . . {Hand held tube cutters}
- 3/18 . to obtain cubes or the like ([ice harvesting F25C 5/02](#))
- 3/185 . . {Grid like cutters}
- 3/20 . . using reciprocating knives
- 3/22 . . using rotating knives
- 3/225 . . . {with adjustable knives}
- 3/24 . to obtain segments other than slices, e.g. cutting pies
- 3/245 . . {having means to change the number of equal segments, e.g. for pies}
- 3/26 . . specially adapted for cutting fruit or vegetables, e.g. for onions
- 3/28 . Splitting layers from work; Mutually separating layers by cutting ([B26D 3/30](#) takes precedence; [Recovery of plastics or other constituents of waste material containing plastics B29B 17/00](#))
- 3/281 . . {the work being simultaneously deformed by the application of pressure to obtain profiled workpieces}
- 3/282 . . {by peeling-off}
- 3/283 . . {Household devices therefor}
- 2003/285 . . . {cutting one single slice at each stroke}
- 2003/286 . . . {having a detachable blade that is removable attached to the support}
- 2003/287 . . . {having a holder for the product to be cut}
- 2003/288 . . . {making several incisions and cutting cubes or the like, e.g. so-called "julienne-cutter"}
- 3/30 . Halving devices, e.g. for halving buns
- 5/00 Arrangements for operating and controlling machines or devices for cutting, cutting-out, stamping-out, punching, perforating, or severing by means other than cutting**
- 2005/002 . {Performing a pattern matching operation}
- 5/005 . {Computer numerical control means}
- 5/007 . {Control means comprising cameras, vision or image processing systems}
- 5/02 . Means for moving the cutting member into its operative position for cutting
- 5/04 . . by fluid pressure
- 5/06 . . by electrical means
- 5/08 . Means for actuating the cutting member to effect the cut
- 5/083 . . {Rack-and-pinion means}

## B26D

- 5/086 . . {Electric, magnetic, piezo-electric, electro-magnetic means}
- 5/10 . . Hand or foot actuated means
- 5/12 . . Fluid-pressure means
- 5/14 . . Crank and pin means
- 5/16 . . Cam means
- 5/18 . . Toggle-link means ([B26D 5/10](#) - [B26D 5/16](#) take precedence)
- 5/20 . with interrelated action between the cutting member and work feed
- 5/22 . . having the cutting member and work feed mechanically connected
- 5/24 . . . including a metering device
- 5/26 . . wherein control means on the work feed means renders the cutting member operative
- 5/28 . . . the control means being responsive to presence or absence of work
- 5/30 . . having the cutting member controlled by scanning a record carrier
- 5/32 . . . with the record carrier formed by the work itself
- 5/34 . . . scanning being effected by a photosensitive device
- 5/36 . . . scanning being effected by magnetic means
- 5/38 . with means operable by the moving work to initiate the cutting action
- 5/40 . . including a metering device
- 5/42 . with interrelated action between work feed and clamp ([work clamping arrangements B26D 7/02](#))
- 7/00** **Details of apparatus for cutting, cutting-out, stamping-out, punching, perforating, or severing by means other than cutting (cutters [B26D 1/00](#); arrangements for guiding hand cutting tools [B26B 29/06](#); punching tools or dies, cutting-out knives or dies [B26F](#))**
- 7/0006 . {Means for guiding the cutter (for hand knives [B26B 29/06](#); for band-knives [B26D 1/54](#))}
- 2007/0012 . {Details, accessories or auxiliary or special operations not otherwise provided for}
- 2007/0018 . . {Trays, reservoirs for waste, chips or cut products}
- 2007/0025 . . {Sterilizing}
- 2007/0031 . . {floating a web during slitting}
- 2007/0037 . . {the cutter being a so-called "iris cutter"}
- 2007/0043 . . {the cutting machine comprising a linear motor}
- 2007/005 . . {cutters, e.g. guillotines, used in a label maker or printer}
- 2007/0056 . . {Rotating a pile of sheets in the plane of the sheets}
- 2007/0062 . . {Rounding off the end of self adhesive labels on tapes}
- 2007/0068 . . {Trimming and removing web edges}
- 2007/0075 . . {so-called "winder slitters"}
- 2007/0081 . . {Cutting on three sides, e.g. trilateral trimming}
- 2007/0087 . . {for use on a desktop}
- 2007/0093 . . {for embossing, forming, creasing, flange forming}
- 7/01 . Means for holding or positioning work
- 2007/011 . . {by clamping claws, e.g. in high speed slicers for food products}
- 2007/013 . . {the work being tubes, rods or logs}
- 7/015 . . {for sheet material or piles of sheets ([B26D 7/018](#) and [B26D 7/02](#) take precedence)}
- 7/016 . . . {Back gauges (for metal shearing machines [B23D 33/10](#))}
- 7/018 . . {Holding the work by suction}
- 7/02 . . with clamping means {([B26D 7/018](#) takes precedence)}
- 7/025 . . . {acting upon planar surfaces ([B26D 7/04](#) takes precedence)}
- 7/04 . . . providing adjustable clamping pressure
- 7/06 . Arrangements for feeding or delivering work of other than sheet, web, or filamentary form (feeding or discharging sheets, webs, or filaments [B65H](#))
- 7/0608 . . {by pushers ([B26D 7/0616](#), [B26D 7/0625](#) and [B26D 7/0641](#) take precedence)}
- 7/0616 . . {by carriages, e.g. for slicing machines}
- 7/0625 . . {by endless conveyors, e.g. belts}
- 7/0633 . . . {by grippers}
- 7/0641 . . {using chutes, hoppers, magazines}
- 7/065 . . {by the cutter itself because of its form}
- 7/0658 . . {using fluid, e.g. hydraulic, acting directly on the work}
- 7/0666 . . {by screw or rotary spiral conveyors}
- 7/0675 . . {specially adapted for piles of sheets}
- 7/0683 . . {specially adapted for elongated articles}
- 7/0691 . . {by centrifugal force}
- 7/08 . Means for treating work or cutting member to facilitate cutting ([tensioning band cutters B26D 1/48](#))
- 2007/082 . . {Guiding or pushing a web into a favorable position by deflector means}
- 7/084 . . {specially adapted for cutting articles composed of at least two different materials, e.g. using cutters of different shapes ([cutting concrete B28B 11/14](#))}
- 7/086 . . {by vibrating, e.g. ultrasonically}
- 7/088 . . {by cleaning or lubricating ([sterilizing B26D 1/00](#))}
- 7/10 . . by heating (with Laser [B23K 26/00](#); severing by heating [B26F](#))
- 7/12 . . by sharpening the cutting member
- 7/14 . . by tensioning the work
- 7/18 . Means for removing cut-out material or waste
- 2007/1809 . . {by stripping fingers}
- 7/1818 . . {by pushing out}
- 7/1827 . . {by tearing}
- 7/1836 . . {by pulling out}
- 7/1845 . . {by non mechanical means}
- 7/1854 . . . {by air under pressure}
- 7/1863 . . . {by suction}
- 2007/1872 . . {using breakaway pins}
- 2007/1881 . . {using countertools}
- 2007/189 . . {Mounting blanking, stripping and break-out tools}
- 7/20 . Cutting beds {([B26D 7/018](#) takes precedence; supporting beds for severing by means of a fluid jet [B26F 3/008](#))}
- 2007/202 . . {Rollers or cylinders being pivoted during operation}
- 7/204 . . {Anvil rollers}
- 2007/206 . . {having a travelling gap}
- 2007/208 . . {having a cleaning device}
- 7/22 . Safety devices specially adapted for cutting machines ([safety devices in general F16P](#))
- 7/225 . . {for food slicers}

## B26D

- 7/24 . . . arranged to disable the operating means for the cutting member
- 7/26 . . Means for mounting or adjusting the cutting member; Means for adjusting the stroke of the cutting member
- 2007/2607 . . . {for mounting die cutters}
- 7/2614 . . . {Means for mounting the cutting member}
- 7/2621 . . . . {for circular cutters}
- 7/2628 . . . {Means for adjusting the position of the cutting member}
- 7/2635 . . . . {for circular cutters}
- 7/2642 . . . . {for slotting cutters}
- 7/265 . . . . {Journals, bearings or supports for positioning rollers or cylinders relatively to each other}
- 2007/2657 . . . {Auxiliary carriages for moving the tool holders}
- 2007/2664 . . . {for radial adjustment}
- 2007/2671 . . . {for cutters moving in a planetary motion on their support, e.g. so-called "Ferris Wheels"}
- 2007/2678 . . . {for cutting pens mounting in a cutting plotter}
- 2007/2685 . . . {flexible mounting means}
- 2007/2692 . . . {the rollers or cylinders being mounted skewed}
- 7/27 . . Means for performing other operations combined with cutting ([B26D 9/00](#) takes precedence)
- 7/28 . . . for counting the number of cuts or measuring cut lengths ([B26D 5/24](#), [B26D 5/40](#) take precedence)
- 7/30 . . . for weighing cut product
- 7/32 . . . for conveying or stacking cut product ([means for removing cut-out material or waste B26D 7/18](#))
- 2007/322 . . . . {the cut products being sheets, e.g. sheets of paper}
- 7/325 . . . . {stacking the cut product individually separated by separator elements}
- 2007/327 . . . . {the cut products being slices of bread}
- 7/34 . . . for applying a coating, such as butter, to cut product
- 9/00 Cutting apparatus combined with punching or perforating apparatus or with dissimilar cutting apparatus**
- 11/00 Combinations of several similar cutting apparatus**
- 2011/005 . . . {in combination with different kind of cutters, e.g. two serial slitters in combination with a transversal cutter}
- 2210/00 Machines or methods used for cutting special materials**
- 2210/02 . . . for cutting food products, e.g. food slicers
- 2210/04 . . . controlling the volume by pressing the food product, e.g. meat to a predetermined shape before cutting
- 2210/06 . . . for bread, e.g. bread slicing machines for use in a retail store
- 2210/08 . . . Idle cutting
- 2210/11 . . . for cutting web rolls