

SECTION B — PERFORMING OPERATIONS; TRANSPORTING

B26 HAND CUTTING TOOLS; CUTTING; SEVERING

B26D CUTTING; DETAILS COMMON TO MACHINES FOR SEVERING, e.g. BY CUTTING, PERFORATING, PUNCHING, STAMPING-OUT (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; devices for withdrawing samples by cutting G01N 1/04; for light guides G02B 6/25; cutting processed photographic material G03D 15/04) [2, 5]

Note(s)

- This subclass covers :
 - cutting non-metallic sheet material or 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, or 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.

Subclass index

CUTTING CHARACTERISED BY THE CUTTING MEMBER OR BY THE NATURE OF THE CUT PERFORMED.....	1/00, 3/00
ARRANGEMENTS FOR OPERATING AND CONTROLLING; DETAILS OF APPARATUS FOR SEVERING.....	5/00, 7/00
COMBINED APPARATUS.....	9/00, 11/00

1/00 Cutting through work characterised by the nature or movement of the cutting member; Apparatus or machines therefor; Cutting members therefor [3]	1/14	• • • with a circular cutting member, e.g. disc cutter [3]
1/01 • involving a cutting member which does not travel with the work [3]	1/143	• • • • rotating about a stationary axis (B26D 1/20-B26D 1/24 take precedence) [3]
1/02 • • having a stationary cutting member (B26D 1/547 takes precedence) [3]	1/147	• • • • • with horizontal cutting member [3]
1/03 • • • with a plurality of cutting members [3]	1/15	• • • • • with vertical cutting member [3]
1/04 • • having a linearly-movable cutting member (B26D 1/46, B26D 1/547 take precedence) [3]	1/153	• • • • • with inclined cutting member [3]
1/06 • • • wherein the cutting member reciprocates (cup or like cutting members B26D 1/44) [3]	1/157	• • • • • rotating about a movable axis (B26D 1/20-B26D 1/24 take precedence) [3]
1/08 • • • • of the guillotine type [3]	1/16	• • • • • mounted on a movable arm or the like [3]
1/09 • • • • • with a plurality of cutting members [3]	1/18	• • • • • mounted on a movable carriage [3]
1/10 • • • • in, or substantially in, a direction parallel to the cutting edge [3]	1/20	• • • • • coaxing with a fixed member [3]
1/11 • • • • • with a plurality of cutting members [3]	1/22	• • • • • coaxing with a movable member, e.g. a roller (B26D 1/24 takes precedence) [3]
1/12 • • having a cutting member moving about an axis (B26D 1/547 takes precedence; cup or like cutting members B26D 1/44) [3]	1/24	• • • • • coaxing with another disc cutter [3]
	1/25	• • • • with a non-circular cutting member [3]
	1/26	• • • • moving about an axis substantially perpendicular to the line of cut [3]
	1/28	• • • • • and rotating continuously in one direction during cutting [3]

B26D

- 1/29 • • • • • with cutting member mounted in the plane of a rotating disc, e.g. for slicing beans [3]
- 1/30 • • • • • with limited pivotal movement to effect cut [3]
- 1/34 • • • • • moving about an axis parallel to the line of cut [3]
- 1/36 • • • • • and rotating continuously in one direction during cutting, e.g. mounted on a rotary cylinder (for flying cutting B26D 1/62) [3]
- 1/38 • • • • • and coacting with a fixed blade or other fixed member [3]
- 1/40 • • • • • and coacting with a rotary member [3]
- 1/42 • • • • • and slidably mounted in a rotary member [3]
- 1/43 • • • • • moving about another axis, e.g. mounted on the surface of a cone or curved body [3]
- 1/44 • • having a cup or like cutting member [3]
- 1/45 • • having a cutting member the movement of which is not covered by any preceding group [3]
- 1/46 • • having an endless band-knife or the like [3]
- 1/48 • • • with tensioning means [3]
- 1/50 • • • with a plurality of band-knives or the like [3]
- 1/52 • • • having adjustable spacing between knives [3]
- 1/54 • • • Guides for band-knives or the like [3]
- 1/547 • • having a wire-like cutting member (endless wire B26D 1/46; severing using a heated wire B26F 3/12) [3]
- 1/553 • • • with a plurality of wire-like cutting members [3]
- 1/56 • involving a cutting member which travels with the work, i.e. flying cutter (flying shears for metal B23D 25/00; flying saws for metal B23D 45/18) [3]
- 1/58 • • and is mounted on a movable arm or the like [3]
- 1/60 • • and is mounted on a movable carriage [3]
- 1/62 • • and is rotating about an axis parallel to the line of cut, e.g. mounted on a rotary cylinder [3]

3/00 Cutting work characterised by the nature of the cut made; Apparatus therefor [3]

- 3/02 • Bevelling
- 3/06 • Grooving involving removal of material from the surface of the work
- 3/08 • Making a superficial cut in the surface of the work without removal of material, e.g. scoring, incising
- 3/10 • Making cuts of other than simple rectilinear form (cutting-out B26F)
- 3/11 • • to obtain pieces of spiral or helical form [3]
- 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
- 3/18 • to obtain cubes or the like (ice harvesting F25C 5/02) [3]
- 3/20 • • using reciprocating knives
- 3/22 • • using rotating knives
- 3/24 • to obtain segments other than slices, e.g. cutting 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 take precedence; recovery of plastics or other constituents of waste material containing plastics B29B 17/00) [3]
- 3/30 • Halving devices, e.g. for halving buns [3]

Note(s)

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 or severing by means other than cutting.

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

- 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
- 5/10 • • 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) [5]

- 7/01 • Means for holding or positioning work [3]
- 7/02 • • with clamping means [3]
- 7/04 • • • providing adjustable clamping pressure [3]
- 7/06 • Arrangements for feeding or delivering work of other than sheet, web, or filamentary form (feeding or discharging sheets, webs, or filaments B65H)
- 7/08 • Means for treating work or cutting member to facilitate cutting (tensioning band cutters B26D 1/48)
- 7/10 • • by heating (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
- 7/20 • Cutting beds
- 7/22 • Safety devices specially adapted for cutting machines (safety devices in general F16P)
- 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
- 7/27 • Means for performing other operations combined with cutting (B26D 9/00 takes precedence) [3]
- 7/28 • • for counting the number of cuts or measuring cut lengths (B26D 5/24, B26D 5/40 take precedence) [3]
- 7/30 • • for weighing cut product [3]
- 7/32 • • for conveying or stacking cut product (means for removing cut-out material or waste B26D 7/18) [3]
- 7/34 • • for applying a coating, such as butter, to cut product [3]
- 9/00 Cutting apparatus combined with punching or perforating apparatus or with dissimilar cutting apparatus**
- 11/00 Combinations of several similar cutting apparatus**