

**CPC****COOPERATIVE PATENT CLASSIFICATION****B26F**

**PERFORATING; PUNCHING; CUTTING-OUT; STAMPING-OUT; SEVERING BY MEANS OTHER THAN CUTTING** (marking-out, perforating or making buttonholes [A41H 25/00](#); shoemaking [A43D](#) ; surgery [A61B](#) ; punching metal [B21D](#) ; drilling metal [B23B](#) ; cutting of metal by applying heat locally, e.g. flame cutting, [B23K](#) ; cutting by abrasive fluid jets [B24C 5/02](#); details common to machines for severing [B26D](#) ; drilling wood [B27C](#) ; drilling 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](#) ; of glass [C03B](#) ; of leather [C14B](#) ; of textile materials [D06H](#) ; for light guides [G02B 6/25](#); of tickets [G07B](#) )

**NOTE**

This subclass covers:

perforating, punching, cutting-out, stamping-out;

severing, by means other than cutting, non-metallic sheet materials or metal foil in general;

severing, by means other than cutting, other forms of non-metallic material not otherwise provided for.

Attention is drawn to Notes (1) and (2) following the title of subclass [B26D](#) .

**B26F 1/00**

**Perforating; Punching; Cutting-out; Stamping-out; Apparatus therefor** (subjecting the grinding tools or the abrading medium to vibration, e.g. grinding with ultrasonic frequency [B24B 1/04](#), perforating by sand-blasting [B24C](#) ; {e.g. abrasive blasting used for cutting [B24C 1/045](#) } ; punching cards or tapes for statistical and record purposes [G06K 1/00](#))

**B26F 1/0007**

. {Perforation of photographic films }

**B26F 1/0015**

. {specially adapted for perforating tubes }

**B26F 1/0023**

.. {by rotary tools, e.g. saws ([B26F 1/0076](#) takes precedence) }

**B26F 1/003**

... {of the drill type }

**B26F 1/0038**

.. {from the inside ([B26F 1/0053](#) takes precedence) }

**B26F 1/0046**

.. {by tools that follow a closed path around the tube ([B26F 1/0053](#) takes precedence) }

**B26F 1/0053**

.. {by machining, e.g. cutting, grinding, projections on the tube wall }

**B26F 1/0061**

.. {whereby the tube moves axially or radially ([B26F 1/0038](#), [B26F 1/0046](#), [B26F 1/0053](#) take precedence) }

**B26F 1/0069**

... {and the tool travels with the tube }

**B26F 1/0076**

... {and the tool rotates }

**B26F 1/0084**

. {specially adapted for perforating rubber }

**B26F 1/0092**

. {Perforating means specially adapted for printing machines ([B26F 1/02](#) to [B26F 1/46](#) take precedence) }

- B26F 1/02 . Perforating by punching, e.g. with relatively-reciprocating punch and bed
- B26F 1/04 . . with selectively-operable punches
- B26F 1/06 . . with punching tools moving with the work
- B26F 1/08 . . . wherein the tools are carried by, and in operation move relative to, a rotative drum or similar support
- B26F 1/10 . . . Roller type punches
- B26F 1/12 . . to notch margins of work
- B26F 1/14 . . Punching tools; Punching dies
  
- B26F 1/16 . Perforating by tool or tools of the drill type
- B26F 1/165 . . {by flow drilling (for metal [B21C 37/292](#)) }
  
- B26F 1/18 . Perforating by slitting, i.e. forming cuts closed at their ends without removal of material
- B26F 1/20 . . with tools carried by a rotating drum or similar support ([B26F 1/22](#) takes precedence)
- B26F 1/22 . . to form non-rectilinear cuts, e.g. for tabs
  
- B26F 1/24 . Perforating by needles or pins
  
- B26F 1/26 . Perforating by non-mechanical means, e.g. by fluid jet
- B26F 1/28 . . by electrical discharges
- B26F 1/31 . . by radiation (by laser beam [B23K 26/00](#))
  
- B26F 1/32 . Hand-held perforating or punching apparatus, e.g. awls
- B26F 1/34 . . power actuated (details or components, e.g. casings, bodies, of portable power-driven tools not particularly related to the operation performed [B25F 5/00](#))
- B26F 1/36 . . Punching or perforating pliers
  
- B26F 1/38 . Cutting-out; Stamping-out
- B26F 1/3806 . . {wherein relative movements of tool head and work during cutting have a component tangential to the work surface ([B26F 1/40](#) takes precedence) }
- B26F 1/3813 . . . {wherein the tool head is moved in a plane parallel to the work in a coordinate system fixed with respect to the work } [9809]
- B26F 1/382 . . . . { wherein the cutting member reciprocates in, or substantially in, a direction parallel to the cutting edge }
- B26F 1/3826 . . . . {using a rotary circular cutting member }
- B26F 1/3833 . . . . {using an endless band-knife or the like }
- B26F 1/384 . . {using rotating drums }
- B26F 1/3846 . . {cutting out discs or the like ([B26F 1/384](#), [B26F 1/40](#) and [B26F 1/44](#) take precedence) }
- B26F 1/3853 . . {cutting out frames ([B26F 1/384](#), [B26F 1/40](#) and [B26F 1/44](#) take precedence) }
- B26F 1/386 . . {Draw punches i.e. punch and die assembled on opposite sides of a workpiece via a connecting member passing through an aperture in the workpiece }
- B26F 1/3866 . . {specially adapted for rubber }
- B26F 1/40 . . using a press, e.g. of the ram type (presses in general [B30B](#) )
- B26F 1/405 . . . {Travelling head presses }

- B26F 1/42 . . . having a pressure roller
- B26F 1/44 . . Cutters therefor; Dies therefor
- B26F 1/46 . . . Loose press knives
  
- B26F 3/00** **Severing by means other than cutting; Apparatus therefor** (severing by grinding [B24B 27/06](#))
  
- B26F 3/002 . {Precutting and tensioning or breaking }
- B26F 3/004 . {by means of a fluid jet (methods for use of abrasive blasting for cutting [B24C 1/045](#); guns for abrasive fluid jets [B24C 5/02](#); perforating by non-mechanical means, e.g. by fluid jet [B26F 1/26](#)) }
- B26F 3/008 . . {Energy dissipating devices therefor, e.g. catchers; Supporting beds therefor (cutting beds in general [B26D 7/20](#)) }
  
- B26F 3/02 . Tearing
  
- B26F 3/04 . Severing by squeezing ([B26F 3/08](#) takes precedence)
  
- B26F 3/06 . Severing by using heat
- B26F 3/08 . . with heated members
- B26F 3/10 . . . with heated rollers or discs
- B26F 3/12 . . . with heated wires
- B26F 3/16 . . by radiation (by laser beam [B23K 26/00](#))
  
- B26F 2001/00** **Perforating; Punching; Cutting-out; Stamping-out; Apparatus therefor** (subjecting the grinding tools or the abrading medium to vibration, e.g. grinding with ultrasonic frequency [B24B 1/04](#), perforating by sand-blasting [B24C](#) ; {e.g. abrasive blasting used for cutting [B24C 1/045](#) } ; punching cards or tapes for statistical and record purposes [G06K 1/00](#))
  
- B26F 2001/32 . Hand-held perforating or punching apparatus, e.g. awls
- B26F 2001/36 . . Punching or perforating pliers
- B26F 2001/365 . . . hand held pliers with handles
  
- B26F 2001/38 . Cutting-out; Stamping-out
- B26F 2001/3873 . . advancing the material stepwise onto the work surface of the cutting machine
- B26F 2001/388 . . controlling the blade orientation along the cutting path
- B26F 2001/3886 . . shearing by reciprocating a straight blade, e.g. nibbling
- B26F 2001/3893 . . cutting out by using an oscillating needle
- B26F 2001/40 . . using a press, e.g. of the ram type (presses in general [B30B](#) )
- B26F 2001/402 . . . curvilinear cutting presses, i.e. the stroke comprising an overlay of a linear and a curved movement
- B26F 2001/407 . . . stepwise sequential punching processes
- B26F 2001/44 . . Cutters therefor; Dies therefor
- B26F 2001/4409 . . . having die balancing or compensating means
- B26F 2001/4418 . . . combining cutting and embossing operations

- B26F 2001/4427 . . . combining cutting and forming operations
- B26F 2001/4436 . . . Materials or surface treatments therefore
- B26F 2001/4445 . . . Matrices, female dies, creasing tools
- B26F 2001/4454 . . . Die heads carrying several moveable tools
- B26F 2001/4463 . . . Methods and devices for rule setting, fixation, preparing cutting dies
- B26F 2001/4472 . . . Cutting edge section features
- B26F 2001/4481 . . . having special lateral or edge outlines or special surface shapes, e.g. apertures
- B26F 2001/449 . . . for shearing, e.g. with adjoining or abutting edges

**B26F 2003/00 Severing by means other than cutting; Apparatus therefor** ([severing by grinding B24B 27/06](#))

- B26F 2003/004 . {by means of a fluid jet (methods for use of abrasive blasting for cutting [B24C 1/045](#); guns for abrasive fluid jets [B24C 5/02](#); perforating by non-mechanical means, e.g. by fluid jet [B26F 1/26](#)) }
- B26F 2003/006 . . having a shutter or water jet deflector

**B26F 2210/00 Perforating, punching, cutting-out, stamping-out, severing by means other than cutting of specific products**

- B26F 2210/02 . of stacked sheets
- B26F 2210/04 . Making plastic pilferproof screw caps by cutting a tamper ring
- B26F 2210/06 . Trimming plastic mouldings
- B26F 2210/08 . of ceramic green sheets, printed circuit boards and the like
- B26F 2210/11 . of plastic containers before compressing
- B26F 2210/12 . of fabrics
- B26F 2210/14 . . the cutting machine comprising a rotary knife
- B26F 2210/16 . . the cutting machine comprising a cutting die