

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