COOPERATIVE PATENT CLASSIFICATION

PERFORMING OPERATIONS; TRANSPORTING

SHAPING

HAND CUTTING TOOLS; CUTTING; SEVERING

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)

NOTES

1. 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.

2. Attention is drawn to Notes (1) and (2) following the title of subclass 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 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 1/000)

1/0007 Perforating of photographic films
1/0015 [specially adapted for perforating tubes]
1/0023 [by rotary tools, e.g. saws (B26F 1/0076 takes precedence)]
1/003 [of the drill type]
1/0038 [from the inside (B26F 1/0053 takes precedence)]
1/0046 [by tools that follow a closed path around the tube (B26F 1/0053 takes precedence)]
1/0053 [by machining, e.g. cutting, grinding, projections on the tube wall]
1/0061 [whereby the tube moves axially or radially (B26F 1/0038, B26F 1/0046, B26F 1/0053 take precedence)]
1/0069 [and the tool travels with the tube]
1/0076 [and the tool rotates]
1/0084 [specially adapted for perforating rubber]
1/0092 [Perforating means specially adapted for printing machines (B26F 1/02, B26F 1/46 take precedence)]

1/02 Perforating by punching, e.g. with relatively-reciprocating punch and bed
1/04 [with selectively-operable punches]
1/06 [with punching tools moving with the work]
1/08 [wherein the tools are carried by, and in operation move relative to, a rotative drum or similar support]
1/10 [Roller type punches]
1/12 [to notch margins of work]
1/14 [Punching tools; Punching dies]
1/16 [Perforating by tool or tools of the drill type]
1/165 [(by flow drilling (for metal B21C 37/292))]
1/18 [Perforating by slitting, i.e. forming cuts closed at their ends without removal of material]
1/20 [with tools carried by a rotating drum or similar support (B26F 1/22 takes precedence)]
1/22 [to form non-rectilinear cuts, e.g. for tabs]
1/24 [Perforating by needles or pins]
1/26 [Perforating by non-mechanical means, e.g. by fluid jet]
1/28 [by electrical discharges]
1/31 [by radiation (by laser beam B23K 26/00)]
1/32 [Hand-held perforating or punching apparatus, e.g. awls]
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)]
1/36 [Punching or perforating pliers]
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) \}
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 \}
1/382 . . . \{ wherein the cutting member reciprocates in, or substantially in, a direction parallel to the cutting edge \}
1/3826 . . . \{ using a rotary circular cutting member \}
1/384 . . . \{ using rotating drums \}
1/3846 . . . \{ cutting out discs or the like (B26F 1/384, B26F 1/40 and B26F 1/44 take precedence) \}
1/3853 . . . \{ cutting out frames (B26F 1/384, B26F 1/40 and B26F 1/44 take precedence) \}
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 \}
1/3866 . . . \{ specially adapted for rubber \}
2001/3833 . . . \{ using an endless band-knife or the like \}
2001/384 . . . \{ using a press, e.g. of the ram type (presses in general B30B) \}
2001/3851 . . . \{ controlling the blade orientation along the cutting path \}
2001/388 . . . \{ curvilinear cutting presses, i.e. the stroke comprising an overlay of a linear and a curved movement \}
2001/3886 . . . \{ shearing by reciprocating a straight blade, e.g. nibbling \}
2001/3893 . . . \{ cutting out by using an oscillating needle \}
1/40 . . . \{ using a press, e.g. of the ram type (presses in general B30B) \}
2001/402 . . . \{ stepwise sequential punching processes \}
2001/4409 . . . \{ having die balancing or compensating means \}
2001/4418 . . . \{ combining cutting and embossing operations \}
2001/4427 . . . \{ combining cutting and forming operations \}
2001/4436 . . . \{ Materials or surface treatments therefore \}
2001/4445 . . . \{ Matrices, female dies, creasing tools \}
2001/4454 . . . \{ Die heads carrying several moveable tools \}
2001/4463 . . . \{ Methods and devices for rule setting, fixation, preparing cutting dies \}
2001/4472 . . . \{ Cutting edge section features \}
2001/4481 . . . \{ having special lateral or edge outlines or special surface shapes, e.g. apertures \}
2001/449 . . . \{ for shearing, e.g. with adjoining or abutting edges \}
1/46 . . . \{ Loose press knives \}
3/008 . . . \{ Energy dissipating devices therefor, e.g. catchers; Supporting beds therefor (cutting beds in general B26D 7/20) \}
3/02 . . . \{ Tearing \}
3/04 . . . \{ Severing by squeezing (B26F 3/08 takes precedence) \}
3/06 . . . \{ Severing by using heat \}
3/08 . . . \{ with heated members \}
3/10 . . . \{ with heated rollers or discs \}
3/12 . . . \{ with heated wires \}
3/16 . . . \{ by radiation (by laser beam B23K 26/00) \}
2210/00 \{ Perforating, punching, cutting-out, stamping-out, severing by means other than cutting of specific products \}
2210/02 . . . \{ of stacked sheets \}
2210/04 . . . \{ Making plastic pilferproof screw caps by cutting a tamper ring \}
2210/06 . . . \{ Trimming plastic mouldings \}
2210/08 . . . \{ of ceramic green sheets, printed circuit boards and the like \}
2210/11 . . . \{ of plastic containers before compressing \}
2210/12 . . . \{ of fabrics \}
2210/14 . . . \{ the cutting machine comprising a rotary knife \}
2210/16 . . . \{ the cutting machine comprising a cutting die \}

Severing by means other than cutting; Apparatus therefor (severing by grinding B24B 27/06)
3/002 . . . \{ Precutting and tensioning or breaking \}
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) \}
3/006 . . . \{ having a shutter or water jet deflector \}

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