

CPC COOPERATIVE PATENT CLASSIFICATION

B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

SHAPING

B21 MECHANICAL METAL-WORKING WITHOUT ESSENTIALLY REMOVING MATERIAL; PUNCHING METAL

(NOTES omitted)

B21K MAKING FORGED OR PRESSED METAL PRODUCTS, e.g. HORSE-SHOES, RIVETS, BOLTS OR WHEELS (making particular articles by working sheet metal without essentially removing material [B21D](#); processing wire [B21F](#); making pins, needles or nails [B21G](#); making particular articles by rolling [B21H](#); forging machines, pressing machines, hammering machines, in general [B21J](#); making chains [B21L](#); plating [B23K](#))

NOTE

This subclass includes only forging, pressing, or hammering operations which are specially adapted for use in the manufacture of particular objects and which, so far as the invention is concerned, are not combined with any different metal-working operation unless the latter is a subsidiary operation performed in the same machine.

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.

Making particular articles by forging, pressing, or hammering; Equipment therefor

1/00 Making machine elements

- 1/02 . balls, rolls, or rollers, e.g. for bearings
- 1/025 . . {of bullets}
- 1/04 . ball-races {or sliding bearing races}
- 1/05 . cages for bearings
- 1/06 . axles or shafts
- 1/063 . . {hollow (hollow racks [B21K 1/768](#))}
- 1/066 . . {splined}
- 1/08 . . crankshafts
- 1/10 . . of cylindrical form
- 1/12 . . of specially-shaped cross-section
- 1/14 . fittings
- 1/16 . . parts of pipe or hose couplings
- 1/18 . pistons or plungers
- 1/185 . . {with cooling channels}
- 1/20 . valve parts
- 1/205 . . {rocker arms}
- 1/22 . . poppet valves, e.g. for internal-combustion engines
- 1/24 . . valve bodies; valve seats
- 1/26 . housings or supporting parts, e.g. axle housings, engine mountings
- 1/28 . wheels; discs
- 1/30 . . with gear-teeth
- 1/305 . . . {helical}
- 1/32 . . discs, e.g. disc wheels
- 1/34 . . wheels with spokes
- 1/36 . . with blades
- 1/38 . . rims; tyres

- 1/40 . . hubs
- 1/42 . . pulleys, e.g. cable pulleys
- 1/44 . bolts, studs, or the like (making screw-thread [B21K 1/56](#); making U-bolts [B21K 1/74](#))
- 1/46 . . with heads
- 1/463 . . . {with recessed heads}
- 1/466 . . . {Heading machines with an oscillating die block}
- 1/48 . . . Machines working with hammers, e.g. beating in a radial direction, for forming heads
- 1/50 . . . Trimming or shearing formed heads, e.g. working with dies
- 1/52 . . double-ended, e.g. with heads on both ends (forming heads [B21K 1/46](#))
- 1/54 . . with grooves or notches
- 1/56 . screw-threaded elements
- 1/58 . rivets
- 1/60 . . hollow or semi-hollow rivets
- 1/62 . . special rivets, e.g. with electrical contacts
- 1/64 . nuts (making screw-thread [B21K 1/56](#))
- 1/66 . . from strip bars
- 1/68 . . from round or profiled bars
- 1/70 . . of special shape, e.g. self-locking nuts, wing nuts
- 1/701 . . . {Weld nuts}
- 1/702 . . . {Clinch nuts}
- 1/704 . . . {Cap nuts}
- 1/705 . . . {Castellated nuts}
- 1/707 . . . {Self-locking nuts}
- 1/708 . . . {wing nuts}
- 1/72 . hooks, e.g. crane hooks, railway track spikes (making nails in general [B21G](#))

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