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 . . {spined}
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)
Making particular articles by forging, pressing, or hammering; Equipment therefor

B21K

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

- Making engine or like machine parts not covered by sub-groups of B21K 1/00; Making propellers or the like

- Making tools or tool parts, e.g. piers

- Making railway appurtenances; Making vehicle parts

- Reconditioning railroad accessories, e.g. rails

- Making cutlery wares; Making garden tools or the like

- Making locksmiths' goods, e.g. handles for cases

- Making blacksmiths' goods

- Making sport articles, e.g. skates

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

B21K

- Making articles for agricultural machinery

- Making hollow articles not covered by a single preceding sub-group (essentially from sheet-metal or uniform thin-walled tubes B21D, e.g. B21D 41/00, B21D 51/00)

- Making sport articles, e.g. skates