

B25 HAND TOOLS; PORTABLE POWER-DRIVEN TOOLS; HANDLES FOR HAND IMPLEMENTS; WORKSHOP EQUIPMENT; MANIPULATORS

B25D PERCUSSIVE TOOLS (percussive machines for forging B21J; hand-held drilling machines, in general B23B 45/00, for wood B27C 3/08; percussion drilling of earth or rock E21B) [2]

TOOLS DISTINGUISHED BY OPERATIVE

METHOD 9/00 16/00

HAMMERS, CHISELS, PUNCHES, OR

PICKS 1/00 7/00

DETAILS OR ACCESSORIES 17/00

1/00 Hand hammers; Hammer heads of special shape or materials

- 1/02 . Inserts or attachments forming the striking part of hammer heads (B25D 1/08 B25D 1/14 take precedence) [5]
- 1/04 . with provision for withdrawing or holding nails or spikes
- 1/06 . . Magnetic holders [5]
- 1/08 . having deformable heads (B25D 1/12 takes precedence) [5]
- 1/10 . having work protector surrounding faces (B25D 1/12 takes precedence) [5]
- 1/12 . having shock-absorbing means [5]
- 1/14 . having plural striking faces [5]
- 1/16 . having the impacting head in the form of a sleeve slidable on a shaft, e.g. hammers for driving a valve or draw-off tube into a barrel [5]

3/00 Hand chisels (mortise chisels B27G 17/08)

5/00 Centre punches

- 5/02 . Automatic centre punches

7/00 Picks (combined with other tools B25F)

9/00 Portable percussive tools with fluid-pressure drive, e.g. having several percussive tool bits operated simultaneously (centrifugal or rotary impact type B25D 15/00; portable non-percussive drilling tools driven by fluid pressure or pneumatic power B23B 45/04)

- 9/02 . of the tool-carrier piston type, i.e. in which the tool is connected to an impulse member
- 9/04 . of the hammer piston type, i.e. in which the tool bit or anvil is hit by an impulse member
- 9/06 . Means for driving the impulse member
- 9/08 . . comprising a built-in air compressor
- 9/10 . . comprising a built-in internal-combustion engine
- 9/11 . . operated by combustion pressure generated by detonation of a cartridge
- 9/12 . . comprising a built-in liquid motor
- 9/14 . Control devices for the reciprocating piston
- 9/16 . . Valve arrangements therefor
- 9/18 . . . involving a piston-type slide valve
- 9/20 . . . involving a tubular-type slide valve
- 9/22 . . . involving a rotary-type slide valve
- 9/24 . . . involving a rocking-plate type valve
- 9/26 . . Control devices for adjusting the stroke of the piston or the force or frequency of impact thereof

11/00 Portable percussive tools with electromotor drive (centrifugal or rotary impact type B25D 15/00)

- 11/02 . in which the tool is connected to an impulse member
- 11/04 . in which the tool bit or anvil is hit by an impulse member
- 11/06 . Means for driving the impulse member
- 11/08 . . comprising a worm mechanism
- 11/10 . . comprising a cam mechanism
- 11/12 . . comprising a crank mechanism

13/00 Portable percussive tools with electromagnetic drive (B25D 15/00 takes precedence)

15/00 Portable percussive tools using centrifugal or rotary impact elements

- 15/02 . in which the tool bit or anvil is hit by a rotary impulse member

16/00 Portable percussive machines with superimposed rotation (portable drilling machines with superimposed percussive action B23B 45/16) [3]

17/00 Details of, or accessories for, portable power-driven percussive tools (details or components, e.g. casings, bodies, of portable power-driven tools not particularly related to the operation performed B25F 5/00) [4]

- 17/02 . Percussive tool bits (drill bits for earth drilling E21B 10/00)
- 17/04 . Handles; Handle mountings
- 17/06 . Hammer pistons; Anvils
- 17/08 . Means for retaining and guiding the tool bit, e.g. chucks
- 17/10 . Safety devices (in general F16P)
- 17/11 . Arrangements of noise damping means (noise damping in general G10K 11/16) [3]
- 17/12 . . of exhaust silencers [3]
- 17/14 . Removing or laying dust (flushing boreholes while drilling earth or rock E21B 21/00)
- 17/16 . . by liquid
- 17/18 . . by exhausting dust-loaded air
- 17/20 . Devices for cleaning or cooling tool or work
- 17/22 . . using pressure fluid
- 17/24 . Damping the reaction force
- 17/26 . Lubricating (in general F16N)
- 17/28 . Supports; Devices for holding power-driven percussive tools in working position
- 17/30 . . Pillars and struts
- 17/32 . . Trolleys