

CPC**COOPERATIVE PATENT CLASSIFICATION****B28D****WORKING STONE OR STONE-LIKE MATERIALS****B28D 1/00**

Working stone or stone-like materials, e.g. brick, concrete {or glass}, not provided for elsewhere; machines, devices, tools therefor (fine working of gems, jewels, crystals [B28D 5/00](#); working by grinding or polishing [B24](#); devices or means for dressing or conditioning abrasive surfaces [B24B 53/00](#))

B28D 1/001

. {Cleaning bricks (by milling [B28D 1/185](#))}

B28D 1/003

. {Multipurpose machines; Equipment therefor}

B28D 1/005

. {Cutting sheet laminae in planes between faces (splitting easily splittable material [B28D 1/322](#))}

B28D 1/006

. { Artificial ageing of stones; Providing stones with an antique appearance}

B28D 1/008

.. { by means of a tumbler}

B28D 1/02

. by sawing

B28D 1/025

.. {Use, recovery or regeneration of abrasive mediums ([B28D 5/007](#) takes precedence; for grinding and polishing in general [B24B 57/00](#))}

B28D 1/04

.. with circular {or cylindrical} saw-blades or saw-discs ([B28D 1/10](#) takes precedence)

B28D 1/041

... {with cylinder saws, e.g. trepanning; saw cylinders, e.g. having their cutting rim equipped with abrasive particles}

B28D 1/042

... {the saw blade being carried by a pivoted lever ([B28D 1/043](#) and [B28D 1/044](#) take precedence)}

B28D 1/043

... {Gantry type sawing machines}

B28D 1/044

... {the saw blade being movable on slide ways ([B28D 1/043](#) takes precedence)}

B28D 1/045

... {Sawing grooves in walls; sawing stones from rocks; sawing machines movable on the stones to be cut}

B28D 1/046

... {Sawing in a plane parallel to the work table}

B28D 1/047

... {with the work mounted on a carriage}

B28D 1/048

... {with a plurality of saw blades ([B28D 1/046](#) takes precedence)}

B28D 1/06

.. with reciprocating saw-blades ([B28D 1/10](#) takes precedence)

B28D 1/062

... {the saw blade rotating about its longitudinal axis}

B28D 1/064

... {Sawing grooves in walls; portable sawing machines}

B28D 1/066

... {the workpieces being moved in a horizontal plane, e.g. with vertically or oblique movable saw-blades}

B28D 1/068

... {Components, e.g. guiding means, vibrations damping means, frames, driving means, suspension}

B28D 1/08

.. with saw-blades of endless cutter-type, e.g. chain saws {i.e. saw chains}, strap saws ([B28D 1/10](#) takes precedence)

B28D 1/082

... {consisting of chain saws}

B28D 1/084

.... {the saw chains being mounted on a pivotingly adjustable arm}

- B28D 1/086 . . . {consisting of strap saws}
- B28D 1/088 . . . {Sawing in situ, e.g. stones from rocks, grooves in walls}
- B28D 1/10 . . with provision for measuring
- B28D 1/12 . . Saw-blades {or saw-discs} specially adapted for working stone {(B28D 1/041 takes precedence)}
- B28D 1/121 . . . {Circular saw blades}
- B28D 1/122 . . . {with exchangeable cutter bits or cutter segments}
- B28D 1/124 . . . {Saw chains; rod-like saw blades; saw cables}
- B28D 1/125 . . . {with exchangeable cutter bits or cutter segments}
- B28D 1/127 . . . {Straight, i.e. flat, saw blades; strap saw blades}
- B28D 1/128 . . . {with exchangeable cutter bits or cutter segments}

- B28D 1/14 . by boring or drilling (rotary drilling machines B23B; {tools for drilling machines B23B 51/00}; portabe percussive machines B25D; {rotary drilling machines for mining or quarrying E21C 1/00})
- B28D 1/143 . . {lens-drilling machines}
- B28D 1/146 . . {Tools therefor (drill bits for earth or rock drilling E21B 10/00)}

- B28D 1/16 . by turning

- B28D 1/18 . by milling, e.g. channelling by means of milling tools
- B28D 1/181 . . {using cutters loosely mounted on a turning tool support}
- B28D 1/183 . . {Hand tools, e.g. portable, motor driven}
- B28D 1/185 . . {for brick cleaning}
- B28D 1/186 . . {Tools therefor, e.g. having exchangeable cutter bits (B28D 1/181 takes precedence; bits for picks or pick-holders for mining or quarrying E21C 35/18)}
- B28D 1/188 . . . {with exchangeable cutter bits or cutter segments}

- B28D 1/20 . by planing, e.g. channelling by means of planing tools

- B28D 1/22 . by cutting, e.g. incising
- B28D 1/221 . . {by thermic methods}
- B28D 1/222 . . {by pressing, e.g. presses}
- B28D 1/223 . . . {Hand-held or hand-operated tools for shearing or cleaving}
- B28D 1/225 . . {for scoring or breaking, e.g. tiles}
- B28D 1/226 . . . {with plural scoring tools}
- B28D 1/227 . . {for cutting tubes}
- B28D 1/228 . . {Hand-held or hand-operated tools (B28D 1/222, B28D 1/225 take precedence)}
- B28D 1/24 . . with cutting discs

- B28D 1/26 . by impact tools, e.g. by chisels or other tools having a cutting edge (portable percussive tools B25D)
- B28D 1/265 . . {Scabbling machines or scabbling tools}
- B28D 1/28 . . without cutting edge {e.g. chiseling machines}

- B28D 1/30
 - . to form contours, i.e. curved surfaces, irrespective of the method of working used (for artistic purposes [B44B](#))
- B28D 1/32
 - . Methods and apparatus specially adapted for working materials which can easily be split, e.g. mica, slate, schist
- B28D 1/322
 - .. {Splitting of the working materials}
- B28D 1/325
 - .. {for making holes in easily splittable working materials}
- B28D 1/327
 - .. {for cutting or shearing easily splittable working materials}
- B28D 3/00**

Dressing mill discs or rollers (dressing the tools of sawing machines or sawing devices [B23D 63/00](#); treating the cutting members of cutting machines to facilitate cutting [B26D 7/08](#))
- B28D 3/005
 - . {Tools therefor}
- B28D 3/02
 - . Machines
- B28D 3/04
 - .. for grooving rollers
- B28D 5/00**

Fine working of gems, jewels, crystals, e.g. of semiconductor material; apparatus or devices therefor (working by grinding or polishing [B24](#); for artistic purposes [B44B](#))
- B28D 5/0005
 - . {by breaking, e.g. dicing}
- B28D 5/0011
 - .. {with preliminary treatment, e.g. weakening by scoring}
- B28D 5/0017
 - .. {using moving tools}
- B28D 5/0023
 - ... {rectilinearly}
- B28D 5/0029
 - ... {rotating}
- B28D 5/0035
 - {cooperating with a straight breaking edge}
- B28D 5/0041
 - .. {the workpiece being brought into contact with a suitably shaped rigid body which remains stationary during breaking}
- B28D 5/0047
 - ... {using fluid or gas pressure}
- B28D 5/0052
 - .. {Means for supporting or holding work during breaking (means for conveying work to or discharging work from the breaking machine [B28D 5/0058](#))}
- B28D 5/0058
 - . {Accessories specially adapted for use with machines for fine working of gems, jewels, crystals, e.g. of semiconductor material ([B28D 5/0005](#), [B28D 5/024](#) take precedence)}
- B28D 5/0064
 - .. {Devices for the automatic drive or the program control of the machines}
- B28D 5/007
 - .. {Use, recovery or regeneration of abrasive mediums (for grinding and polishing in general [B24B 57/00](#))}
- B28D 5/0076
 - .. {for removing dust, e.g. by spraying liquids; for lubricating, cooling or cleaning tool or work}
- B28D 5/0082
 - .. {for supporting, holding, feeding, conveying or discharging work}
- B28D 5/0088
 - ... {the supporting or holding device being angularly adjustable}
- B28D 5/0094
 - ... {the supporting or holding device being of the vacuum type}

- B28D 5/02 . by rotary tools, e.g. drills {(B28D 5/0005 takes precedence)}
- B28D 5/021 .. {by drilling}
- B28D 5/022 .. {by cutting with discs or wheels}
- B28D 5/023 ... {with a cutting blade mounted on a carriage}
- B28D 5/024 ... {with the stock carried by a movable support for feeding stock into engagement with the cutting blade, e.g. stock carried by a pivoted arm or a carriage}
- B28D 5/025 {with the stock carried by a pivoted arm}
- B28D 5/026 ... {with a cutting blade carried by a movable arm, e.g. pivoted (B28D 5/023 and B28D 5/028 take precedence)}
- B28D 5/027 ... {with a cutting blade arranged underneath a stationary work table}
- B28D 5/028 ... {with a ring blade having an inside cutting edge}
- B28D 5/029 ... {with a plurality of cutting blades}

- B28D 5/04 . by tools other than rotary type, e.g. reciprocating tools {(B28D 5/0005 takes precedence)}
- B28D 5/042 .. {by cutting with blades or wires mounted in a reciprocating frame}
- B28D 5/045 .. {by cutting with wires or closed-loop blades (B28D 5/042 takes precedence)}
- B28D 5/047 .. {by ultrasonic cutting (using abrading substances or abrading tools subjected to a bouncing action by ultrasonic energy B24B 1/04)}

- B28D 7/00** **Accessories specially adapted for use with machines or devices of the preceding groups {(B28D 5/0058 takes precedence)}**

- B28D 7/005 . {Devices for the automatic drive or the program control of the machines}

- B28D 7/02 . for removing or laying dust, e.g. by spraying liquids; for cooling work

- B28D 7/04 . for supporting or holding work {or conveying or discharging work (B28D 1/047, B28D 5/0041, B28D 5/0052 take precedence)}
- B28D 7/043 .. {the supporting or holding device being angularly adjustable}
- B28D 7/046 .. {the supporting or holding device being of the vacuum type}