

**CPC****COOPERATIVE PATENT CLASSIFICATION****B28D****WORKING STONE OR STONE-LIKE MATERIALS****Guidance heading:**

- 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 }