

**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

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| 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}  |
| <b>B28D 3/00</b> | <b>Dressing mill discs or rollers</b> (dressing the tools of sawing machines or sawing devices <a href="#">B23D 63/00</a> ; treating the cutting members of cutting machines to facilitate cutting <a href="#">B26D 7/08</a> ) |
| B28D 3/005       | . {Tools therefor}   |
| B28D 3/02        | . Machines   |
| B28D 3/04        | . . for grooving rollers   |
| <b>B28D 5/00</b> | <b>Fine working of gems, jewels, crystals, e.g. of semiconductor material; apparatus or devices therefor</b> (working by grinding or polishing <a href="#">B24</a> ; for artistic purposes <a href="#">B44B</a> )              |
| 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 <a href="#">B28D 5/0058</a> )}  |
| B28D 5/0058      | . {Accessories specially adapted for use with machines for fine working of gems, jewels, crystals, e.g. of semiconductor material ( <a href="#">B28D 5/0005</a> , <a href="#">B28D 5/0024</a> 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 <a href="#">B24B 57/00</a> )}  |
| 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 {( <a href="#">B28D 5/0005</a> 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}