

**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](#) } ; [portable 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 }