

CPC COOPERATIVE PATENT CLASSIFICATION

B PERFORMING OPERATIONS; TRANSPORTING (NOTES omitted)

SHAPING

B24 GRINDING; POLISHING (NOTE omitted)

B24C ABRASIVE OR RELATED BLASTING WITH PARTICULATE MATERIAL

NOTES

1. This subclass covers:
 - the use of a blast of any particles or pellets dispersed in air, gas, or liquid for the treatment of surfaces or cutting of materials, the particles usually being of abrasive material;
 - the equivalent use of a jet of particles or pellets projected or energised by means other than a stream of air
 - {the equivalent use of material without particles or pellets for deburring, removal of extended surface areas or jet milling of local recessions, e.g. grooves}
2. In this subclass, the following terms are used with the meanings indicated:
 - "abrasive" covers any material used in the manner mentioned in Note (1) above;
 - "blast" covers any equivalent jet of material mentioned in Note (1) above

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

| | | | |
|-------------|--|-------|---|
| 1/00 | Methods for use of abrasive blasting for producing particular effects; Use of auxiliary equipment in connection with such methods | 3/08 | • essentially adapted for abrasive blasting of travelling stock or travelling workpieces |
| 1/003 | • {using material which dissolves or changes phase after the treatment, e.g. ice, CO ₂ } | 3/081 | • • {for travelling bundles of wires} |
| 1/006 | • {using material without particles or pellets for deburring, removal of extended surface areas or jet milling of local recessions, e.g. grooves} | 3/083 | • • {Transfer or feeding devices; Accessories therefor} |
| 1/02 | • for sharpening or cleaning cutting tools, e.g. files | 3/085 | • • {the travelling workpieces being moved into different working positions during travelling} |
| 1/04 | • for treating only selected parts of a surface, e.g. for carving stone or glass | 3/086 | • • • {whereby the workpieces are turned through a rotational arc of about 180 degrees} |
| 1/045 | • • {for cutting (energy dissipating devices therefor B26F 3/008)} | 3/088 | • • {using a vibratory transfer mechanism} |
| 1/06 | • for producing matt surfaces, e.g. on plastic materials, on glass | 3/10 | • • for treating external surfaces |
| 1/08 | • for polishing surfaces, e.g. {smoothing a surface} by making use of liquid-borne abrasives | 3/12 | • • • Apparatus using nozzles |
| 1/083 | • • {Deburring} | 3/14 | • • • Apparatus using impellers |
| 1/086 | • • {Descaling; Removing coating films} | 3/16 | • • for treating internal surfaces |
| 1/10 | • for compacting surfaces, e.g. shot-peening (for deforming sheet metal, tubes or profiles B21D 31/06 ; as a metallurgical treatment C21D 7/00 , C22F 1/00) | 3/18 | • essentially provided with means for moving workpieces into different working positions (B24C 3/08 takes precedence) |
| 3/00 | Abrasive blasting machines or devices; Plants | 3/20 | • • the work being supported by turntables |
| 3/02 | • characterised by the arrangement of the component assemblies with respect to each other (B24C 3/08 , B24C 3/18 take precedence) | 3/22 | • • • Apparatus using nozzles |
| 3/04 | • • stationary | 3/24 | • • • Apparatus using impellers |
| 3/06 | • • movable; portable | 3/26 | • • the work being supported by barrel cages, i.e. tumblers; Gimbal mountings therefor |
| 3/062 | • • • {for vertical surfaces} | 3/263 | • • • {using refrigerating means} |
| 3/065 | • • • {with suction means for the abrasive and the waste material} | 3/266 | • • • {for continuously travelling workpieces} |
| 3/067 | • • • • {Self-contained units for floorings} | 3/28 | • • • Apparatus using nozzles |
| | | 3/30 | • • • Apparatus using impellers |
| | | 3/32 | • designed for abrasive blasting of particular work, e.g. the internal surfaces of cylinder blocks (B24C 3/08 , B24C 3/18 take precedence) |
| | | 3/322 | • • {for electrical components} |
| | | 3/325 | • • {for internal surfaces, e.g. of tubes} |

- 3/327 . . . {by an axially-moving flow of abrasive particles without passing a blast gun, impeller or the like along the internal surface (polishing or abrading surfaces using plastically deformable grinding compound, moved relatively to the workpiece under the influence of pressure [B24B 31/116](#))}
- 3/34 . . for cleaning sparking plugs

- 11/00 Selection of abrasive materials {or additives} for abrasive blasts (polishing compositions [C09G](#))**
- 11/005 . {of additives, e.g. anti-corrosive or disinfecting agents in solid, liquid or gaseous form}

Accessories or equipment for abrasive blasting machines or devices

- 5/00 Devices or accessories for generating abrasive blasts**
- 5/005 . {Vibratory devices, e.g. for generating abrasive blasts by ultrasonic vibrations (sonic cleaning in general [B08B 3/12](#))}
- 5/02 . Blast guns, e.g. for generating high velocity abrasive fluid jets for cutting materials {(perforating by fluid jet [B26F 1/26](#))}
- 5/04 . . Nozzles therefor (nozzles in general [B05B](#))
- 5/06 . Impeller wheels; Rotor blades therefor
- 5/062 . . {Rotor blades or vanes; Locking means therefor}
- 5/064 . . {One-piece wheels; Integral impeller units, e.g. made by casting}
- 5/066 . . {Housings; Accessories therefor, e.g. liners}
- 5/068 . . {Transferring the abrasive particles from the feeding means onto the propeller blades, e.g. using central impellers}
- 5/08 . Devices for generating abrasive blasts non-mechanically, e.g. of metallic abrasives by means of a magnetic field {or by detonating cords}
- 7/00 Equipment for feeding abrasive material; Controlling the flowability, constitution, or other physical characteristics of abrasive blasts**
- 7/0007 . {the abrasive material being fed in a liquid carrier}
- 7/0015 . . {with control of feed parameters, e.g. feed rate of abrasive material or carrier}
- 7/0023 . . . {of feed pressure}
- 7/003 . . {with means for preventing clogging of the equipment}
- 7/0038 . . {the blasting medium being a gaseous stream}
- 7/0046 . {the abrasive material being fed in a gaseous carrier}
- 7/0053 . . {with control of feed parameters, e.g. feed rate of abrasive material or carrier}
- 7/0061 . . . {of feed pressure}
- 7/0069 . . {with means for preventing clogging of the equipment or for preventing abrasive entering the airway}
- 7/0076 . . {the blasting medium being a liquid stream}
- 7/0084 . {the abrasive material being fed in a mixture of liquid and gas ([B24C 7/0038](#), [B24C 7/0076](#) take precedence; blasting medium with additives [B24C 11/005](#))}
- 7/0092 . {the abrasive material being fed by mechanical means, e.g. by screw conveyors}
- 9/00 Appurtenances of abrasive blasting machines or devices, e.g. working chambers, arrangements for handling used abrasive material**
- 9/003 . {Removing abrasive powder out of the blasting machine}
- 9/006 . {Treatment of used abrasive material}