

## SECTION B — PERFORMING OPERATIONS; TRANSPORTING

### B23 MACHINE TOOLS; METAL-WORKING NOT OTHERWISE PROVIDED FOR

**B23H WORKING OF METAL BY THE ACTION OF A HIGH CONCENTRATION OF ELECTRIC CURRENT ON A WORKPIECE USING AN ELECTRODE WHICH TAKES THE PLACE OF A TOOL; SUCH WORKING COMBINED WITH OTHER FORMS OF WORKING OF METAL** (processes for the electrolytic or electrophoretic production of coatings, electroforming, or apparatus therefor C25D; processes for the electrolytic removal of material from objects C25F; manufacturing printed circuits using precipitation techniques to apply the conductive material to form the desired conductive pattern H05K 3/18) [4]

#### Note(s) [4]

This subclass covers the working of metal described as "electroerosion".

#### Subclass index

ELECTRICAL DISCHARGE MACHINING.....	1/00
ELECTROCHEMICAL MACHINING.....	3/00
COMBINED MACHINING.....	5/00
COMMON PROCESSES OR APPARATUS.....	7/00
MACHINING PARTICULAR OBJECTS OR OBTAINING SPECIAL EFFECTS OR RESULTS.....	9/00
AUXILIARY APPARATUS OR DETAILS.....	11/00

<b>1/00</b>	<b>Electrical discharge machining, i.e. removing metal with a series of rapidly recurring electrical discharges between an electrode and a workpiece in the presence of a fluid dielectric [4, 2006.01]</b>	5/06	• Electrochemical machining combined with mechanical working, e.g. grinding or honing [4, 2006.01]
1/02	• Electric circuits specially adapted therefor, e.g. power supply, control, preventing short circuits or other abnormal discharges [4, 2006.01]	5/08	• • Electrolytic grinding [4, 2006.01]
1/04	• Electrodes specially adapted therefor or their manufacture (B23H 9/00 takes precedence) [4, 2006.01]	5/10	• Electrodes specially adapted therefor or their manufacture (B23H 1/04, B23H 3/04 take precedence) [4, 2006.01]
1/06	• • Electrode material [4, 2006.01]	5/12	• Working media [4, 2006.01]
1/08	• Working media [4, 2006.01]	5/14	• Supply or regeneration of working media [4, 2006.01]
1/10	• Supply or regeneration of working media [4, 2006.01]	<b>7/00</b>	<b>Processes or apparatus applicable to both electrical discharge machining and electrochemical machining [4, 2006.01]</b>
<b>3/00</b>	<b>Electrochemical machining, i.e. removing metal by passing current between an electrode and a workpiece in the presence of an electrolyte [4, 2006.01]</b>	7/02	• Wire-cutting [4, 2006.01]
3/02	• Electric circuits specially adapted therefor, e.g. power supply, control, preventing short circuits [4, 2006.01]	7/04	• • Apparatus for supplying current to working gap; Electric circuits specially adapted therefor [4, 2006.01]
3/04	• Electrodes specially adapted therefor or their manufacture (B23H 9/00 takes precedence) [4, 2006.01]	7/06	• • Control of the travel curve of the relative movement between electrode and workpiece [4, 2006.01]
3/06	• • Electrode material [4, 2006.01]	7/08	• • Wire electrodes [4, 2006.01]
3/08	• Working media [4, 2006.01]	7/10	• • • Supporting, winding or electrical connection of wire-electrode [4, 2006.01]
3/10	• Supply or regeneration of working media [4, 2006.01]	7/12	• Rotating-disc electrodes [4, 2006.01]
<b>5/00</b>	<b>Combined machining [4, 2006.01]</b>	7/14	• Electric circuits specially adapted therefor, e.g. power supply [4, 2006.01]
5/02	• Electrical discharge machining combined with electrochemical machining [4, 2006.01]	7/16	• • for preventing short circuits or other abnormal discharges [4, 2006.01]
5/04	• Electrical discharge machining combined with mechanical working [4, 2006.01]	7/18	• • for maintaining or controlling the desired spacing between electrode and workpiece [4, 2006.01]
		7/20	• • for programme-control, e.g. adaptive [4, 2006.01]

## B23H

- 7/22 • Electrodes specially adapted therefor or their manufacture (B23H 7/08, B23H 7/12, B23H 9/00 take precedence) **[4, 2006.01]**
- 7/24 • • Electrode material **[4, 2006.01]**
- 7/26 • Apparatus for moving or positioning electrode relatively to workpiece; Mounting of electrode **[4, 2006.01]**
- 7/28 • • Moving electrode in a plane normal to the feed direction, e.g. orbiting **[4, 2006.01]**
- 7/30 • • Moving electrode in the feed direction (B23H 7/32 takes precedence) **[4, 2006.01]**
- 7/32 • • Maintaining desired spacing between electrode and workpiece **[4, 2006.01]**
- 7/34 • Working media **[4, 2006.01]**
- 7/36 • Supply or regeneration of working media **[4, 2006.01]**
- 7/38 • Influencing metal working by using specially adapted means not directly involved in the removal of metal, e.g. ultrasonic waves, magnetic fields or laser irradiation **[4, 2006.01]**

- 9/00 Machining specially adapted for treating particular metal objects or for obtaining special effects or results on metal objects** (heat treatment by cathodic discharge C21D 1/38) **[4, 2006.01]**
  - 9/02 • Trimming or deburring **[4, 2006.01]**
  - 9/04 • Treating surfaces of rolls **[4, 2006.01]**
  - 9/06 • Marking or engraving **[4, 2006.01]**
  - 9/08 • Sharpening **[4, 2006.01]**
  - 9/10 • Working turbine blades or nozzles **[4, 2006.01]**
  - 9/12 • Forming parts of complementary shape, e.g. punch-and-die **[4, 2006.01]**
  - 9/14 • Making holes **[4, 2006.01]**
  - 9/16 • • using an electrolytic jet **[4, 2006.01]**
  - 9/18 • Producing external conical surfaces or spikes (B23H 9/08 takes precedence) **[4, 2006.01]**
- 11/00 Auxiliary apparatus or details, not otherwise provided for [4, 2006.01]**