

**MICRO-DISCHARGE TRUING DEVICE AND
FINE MACHINING METHOD USING THE DEVICE**

ABSTRACT OF THE DISCLOSURE

There are provided an electrically conductive grindstone 12 for machining a workpiece 1, a disc-shaped discharge electrode 14 having an outer peripheral edge 14a which can be disposed in the vicinity of a machining surface 12a of the grindstone, an electrode rotating unit 16 for rotating the electrode around an axial center Z, a position controller 18 for controlling a relative position of the outer peripheral edge of the electrode and the grindstone, a voltage applying unit 20 for applying a predetermined voltage between the grindstone and the electrode in a pulse manner, and a machining liquid supply unit 22 for supplying an alkaline liquid between the grindstone and the electrode. By stably generating micro-discharge between the outer peripheral edge 14a of the rotating discharge electrode 14 and the machining surface 12a of the electrically conductive grindstone 12, a metal bonded portion of the electrically conductive grindstone is molten/removed with no contact therewith and with high efficiency and precision, and a grindstone surface is corrected to a desired shape.

Fig. 1

