

ELECTRODELESS ELECTROLYTIC DRESSING GRINDING METHOD AND APPARATUS

ABSTRACT OF THE DISCLOSURE

A semi-conductive grindstone (10) comprising grains and a semi-conductive bonding part to fix the grains is prepared, a voltage is applied between the grindstone and the conductive workpiece (1), an conductive grinding fluid is supplied between them, the grindstone is contacted to the workpiece, the bonding part of the grindstone is subjected to electrolytic dressing in the contact point, and the workpiece is simultaneously ground by using the grindstone. A semi-conductive bonding part is preferably composed of metal powder and an insulating resin. Consequently, application is possible to peculiar grindstone such as ball-nose grindstone, grinding process of the workpiece is simultaneously possible with dressing of the working surface of the grindstone by electrolytic dressing, and thus, long time grinding is also possible maintaining high efficiency and high preciseness.

Fig. 3