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ABSTRACT OF THE DISCLOSURE

There are provided a shaft (4) rotating around the shaft's center (5) in a direction (7) in which a blade rotates, and the blade (6) fixed to the shaft (4) and moving at a rate of movement (VLB), wherein the shaft's center (5) rotates at a predetermined rate of rotation (VRA) with a small radius of rotation rapidly, the rate of rotation (VRA) being greater than the rate of movement (VLB). Thus the blade (6) is pressed against and thus cuts a substrate (3) and produces chips (8) and the blade (6) is disengaged from the substrate (3) and the chips (8) thus move in the direction (7) in which the blade rotates and the chips (8) are thus removed from between the cutting edge of the blade (6) and the substrate (3). This can provide reduced working resistance and hence enhanced working efficiency and also prevent the blade (6) surface from having significant frictional heat. Furthermore, the generated frictional heat can readily dissipate and the blade (6) can thus have a long life.