Title (en)
METHOD AND APPARATUS FOR LAPPING OF WORKPIECES

Title (de)
VERFAHREN UND VORRICHTUNG ZUM LÄPPEN VON WERKSTÜCKEN

Title (fr)
PROCEDE ET APPAREIL DE RODAGE DE PIECES A USINER

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Application
EP 00964802 A 20000626

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Abstract (en)
[origin: CA2288590A1] A lapping assembly for lapping a group of workpieces including a pair of lapping discs and a cassette for positioning the workpieces between the lapping discs. The lapping discs are provided with two-component translational oscillations at the appropriate cutting speed, parallel to their working planes. This motion is effected using crank pins rotating about a coaxially positioned axis and elastic members (or swivel-supporting) members coupled to the body of the lapping machine to prevent the lapping discs from rotating. The cassette has an opening having a curvilinear shape for holding the workpieces, and protrusions which extend into the opening. The cassette is mounted on a support element and equipped with a drive to rotate it about a stationary axis. Alternatively, the cassette can be fixed during treatment and the lapping discs can be rotated at a speed less than the cutting speed. The combination of the curvilinear shape of the opening, the oscillations provided to the cassette and the relative rotation of the cassette in relation to the lapping discs cause workpieces to circulate within opening in a pseudo-random manner. The apparatus may also be adapted to finish workpieces to differing heights through the use of a sensor coupled to one lapping disc to detect the pre-set proximity of the other lapping disc.

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