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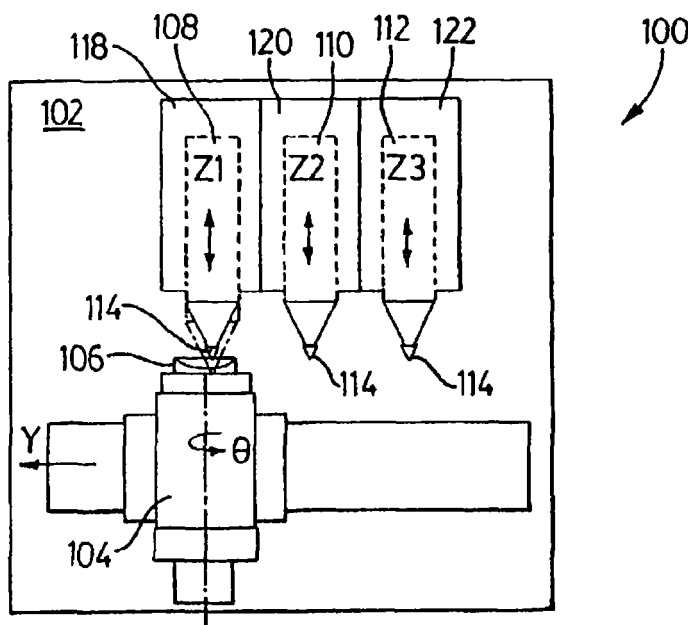
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(54) Title: LENS LATHE WITH VIBRATION CANCELLING ARRANGEMENT



(57) Abstract: A method and apparatus for substantially nullifying vibration and deflection in a single point lens turning lathe (100) having a rapidly reciprocating lens cutting tool (114) and shuttle assembly. The apparatus includes three or more tool shuttles (108, 110, 112) of similar mass mounted for reciprocating movement along respective generally parallel shuttle paths. The shuttles (108, 110, 112) are reciprocally moveable by respective actuators (118, 120, 122) along their respective shuttle paths. The shuttle and tool assemblies are moved by their respective actuators (118, 120, 122) in opposite directions at a rate which causes forces generated by shuttle and tool assemblies moving in one direction to cancel forces arising from the shuttle and tool assembly movement in the opposite direction. Should an odd number of shuttle and tool assemblies be used, the amount of force generated by the mass moving in one direction may be compensated by having a different rate of movement, and hence a different stroke length from the mass moving in the opposite direction.

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