Title (en)
RECIPROCATING DRIVE SYSTEM FOR SCANNING A WORKPIECE

Title (de)
PENDELANTRIEBSSYSTEM ZUM ABTASTEN EINES ARBEITSSTÜCKS

Title (fr)
SYSTEME D'ENTRAINEMENT ALTERNATIF POUR LE BALAYAGE D'UNE PIECE A USINER

Publication
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Application
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Abstract (en)
[origin: WO2005099072A1] A reciprocating drive system, method, and apparatus for scanning a workpiece are provided, wherein a motor comprising a rotor and stator operable to individually rotate about a first axis is operable to reciprocally translate the workpiece with respect to a stationary reference. A shaft rotatably driven by the rotor extends along the first axis, and a scan arm is operably coupled to the shaft, wherein the scan arm is operable to support the workpiece thereon. Cyclical counter rotations of the shaft by the motor are operable to rotate the scan arm, therein scanning the workpiece through the ion beam along a first scan path, wherein the stator acts as a reaction mass to the rotation of the rotor. A controller is further operable to control an electromagnetic force between the rotor and the stator, therein generally determining a rotational position of the rotor and the stator.

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