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(54) **Title**: APPARATUS AND METHOD FOR MAKING FIDUCIALS ON A SUBSTRATE

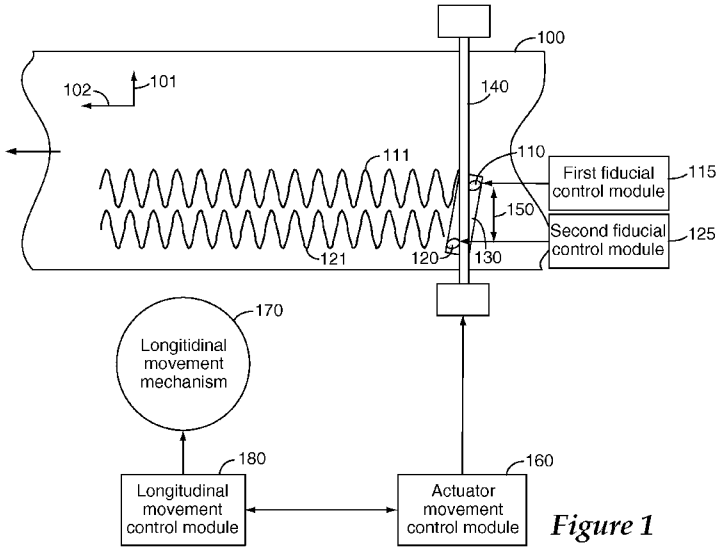


Figure 1

(57) **Abstract**: Fiducials having substantially continuous portions made on a substrate allow the position of the substrate to be determined. An approach for making fiducials involves moving first and second fiducial devices together back and forth across the substrate along a trajectory having a component along the lateral axis of the substrate while the substrate and the first and second fiducial devices are in relative motion along the longitudinal axis of the substrate. The first fiducial device operates to make one fiducial on the substrate during the movement along the trajectory and the relative motion. The second fiducial device operates to make another fiducial on the substrate during the movement along the trajectory and the relative motion. The fiducials may be formed so that they have a constant spatial frequency with the first fiducial being out of phase with respect to the second fiducial.

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