

Abstract

DIFFERENTIAL ACTUATION TECHNIQUE FOR SUB-NANOMETER ACCURACY

The present invention relates to a method to reduce or eliminate inherent and extraneous positional error and nonlinearity of actuation in positioning and motion control by way of differential actuation technique employing multiple counteracting actuators to achieve highly accurate position and motion control in even sub nanometer expanse exploiting the resultant motion/position of the actuators for translational and rotational motions.

Figure 1(a) & (b)