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(54) Title: AN APPARATUS FOR MOVING AN OBJECT IN NANOMETER AND METHOD THEREOF

(57) Abstract: The nanopositioner that consists of two parallelograms is formed in inverted manner to each other. The amplification lever from the actuator point actuates the second parallelogram, which comes from the first one. The lever and the second parallelogram are connected by means of flexural hinges. This entire system is a monolithic structure as shown in figure 5. When the actuator expands, the actuator lever actuates the second parallelogram at the center or middle of its column length. This causes the displacement of both the parallelograms. Since the two parallelograms are perpendicular to each other, perpendicular deflection is reduced. Actuating at the center of the parallelogram length with amplification lever reduces the arcuate motion and linear displacement of the moving stage is obtained in the nanopositioner.

WO 2007/032026 A2