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- c) coupling a biasing element to said rotating element;
- d) exerting a constant or time-varying biasing force on said biasing element, thereby causing said first comb fingers along with said rotating element to undergo a controlled angular displacement from said engagement about said axis; and
- e) applying a voltage between said second comb fingers and said first comb fingers, thereby causing said first comb fingers along with said rotating element to undergo further rotation about said axis in a predetermined fashion.

2. The method of claim 1 further comprising the step of monitoring a position of said rotating element.

3. The method of claim 2, wherein the position monitoring step includes the use of one or more of the following:

- one or more gap closing electrodes,
- a second plurality of first comb fingers coupled to the rotating element and a second plurality of second comb fingers that interdigitate with the first comb fingers in the second plurality,
- a capacitance sensor coupled between the first plurality of comb fingers and the second plurality of comb fingers
- a piezoresistive strain gauge,
- a piezoelectric sensor,
- an optical sensor.

4. The method of claim 2, wherein said monitoring step includes measuring a capacitance between said second comb fingers and said first comb fingers.

5. The method of claim 2 further comprising the step of feeding said position to a feedback mechanism, so as to control said position of said rotating element.

6. The method of claim 1 wherein said biasing element includes one or more of the following:

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- a magnetic material attached to the rotating element,
- a current carrying coil attached to the rotating element,
- one or more gap-closing electrodes attached to the rotating element,
- a piezoelectric mechanism coupled to said rotating element,
- a thermal bimorph actuator coupled to the rotating element,
- a spring-loaded element coupled to the rotating element,
- a stress-bearing material carrying a residual stress gradient, or
- a second plurality of first comb fingers coupled to the rotating element and a second plurality of second comb fingers that interdigitate with the first comb fingers in the second plurality.

7. The method of claim 1, wherein the biasing element of step C applies a fixed force.

8. The method of claim 1, wherein the biasing element of step C applies a variable force.

9. The method of step 1 wherein the biasing element operates on magnetic principals.

10. The method of step 1 wherein the biasing element operates on electrostatic principals.

11. The method claim 5 wherein the position is controlled by controlling a biasing force exerted by the biasing element.

12. The method of claim 5 wherein the position is controlled by varying the voltage applied in step e).

13. The method of claim 5 wherein the position is controlled by controlling a biasing force exerted by the biasing element and by varying the voltage applied in step e).

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