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(54) Title: CYLINDRICAL ELECTROMAGNETIC ACTUATOR

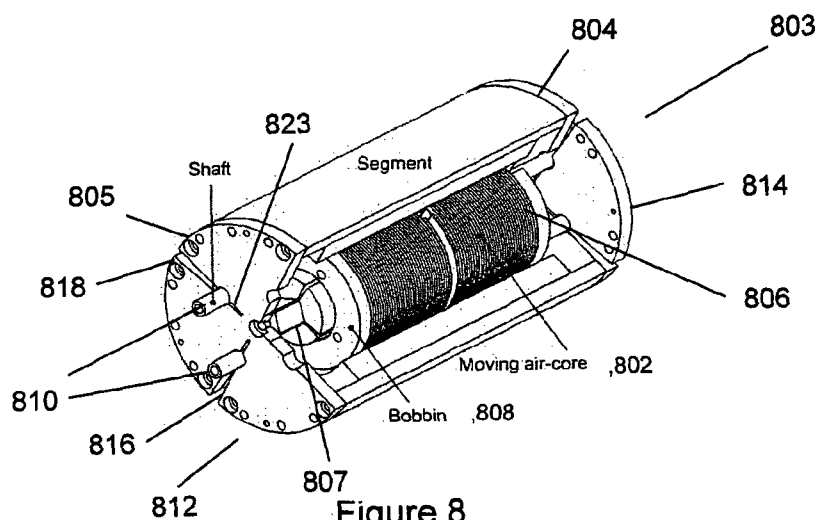


Figure 8

(57) Abstract: A cylindrical-shape electromagnetic actuator comprising a plurality of pairs of magnets, the magnets of each pair being held at a distance from each other with an effective air gap formed therebetween for accommodating a coil structure; and a substantially cylindrical frame structure for supporting the pairs of magnets, the frame structure being configured such that substantially separate closed loop magnetic paths are provided for the respective pairs of magnets.

