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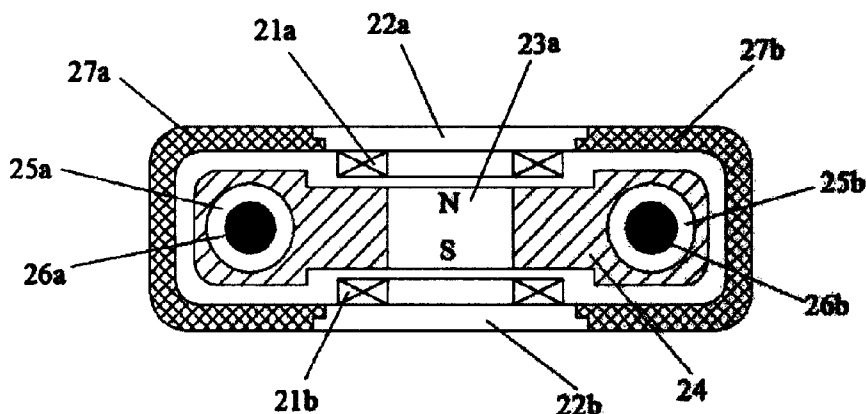


FIG. 2

(57) Abstract: A linear actuator having one or more coils 21a mounted to a first coil back iron 22a; one or more coils mounted 21b to a second coil back iron 22b and two or more magnets 23a, 23b between the first coil back iron 22a and the second coil back iron 22b. A first air gap between the first coil back iron 22a and the magnets 23a, 23b and a second air gap between the second coil back iron 22b and the magnets 23a, 23b have the same width. A structure 24 holds the magnets 23a, 23b in place with a first bushing 25a on a first fixed shaft 26a and a second bushing 25b on a second fixed shaft 26b. When a current passes through the coils 21a, 21b, the structure 24 glides back and forth along the first fixed shaft 26a and the second fixed shaft 26b.



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