

[54] **PERMANENT MAGNET MOTION
CONVERSION DEVICE**

3,811,058 5/1974 Kiniski..... 310/103 X

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[57] **ABSTRACT**

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A permanent magnet motor in one embodiment utilizes a spring-biased reciprocating magnetizable member positioned between two permanent magnets. Magnetic shields in the form of rotatable shutters are located between each permanent magnet and the reciprocating member to alternately shield and expose the member to the magnetic field thereby producing reciprocating motion. A second embodiment utilizes a pair of reciprocating spring-biased permanent magnets with adjacent like magnetic poles separated by a magnetic shield which alternately exposes and shields the like poles from the repelling forces of their magnetic fields.

[52] U.S. Cl. **310/80; 310/103; 310/24**

[51] Int. Cl. **H02k 7/06**

[58] Field of Search 310/20-24,
310/80, 103, 190

[56] **References Cited**

UNITED STATES PATENTS

| | | | |
|-----------|---------|------------------|-----------|
| 1,724,446 | 8/1929 | Worthington..... | 310/46 |
| 3,609,425 | 9/1971 | Sheridan..... | 310/103 |
| 3,703,653 | 11/1972 | Tracy et al..... | 310/103 X |
| 3,773,439 | 11/1973 | Sheridan..... | 310/80 X |

5 Claims, 4 Drawing Figures

