United States Patent [19]

Wachspress

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[54] **FREE FLYING MAGNETIC LEVITATOR**

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[51] **Int. Cl.**[4] **A63H 33/26**

[52] **U.S. Cl.** **446/484**; 310/90.5

[58] **Field of Search** ..... 310/90.5, 52, 68 R; 40/426; 446/129, 133, 484; 335/306

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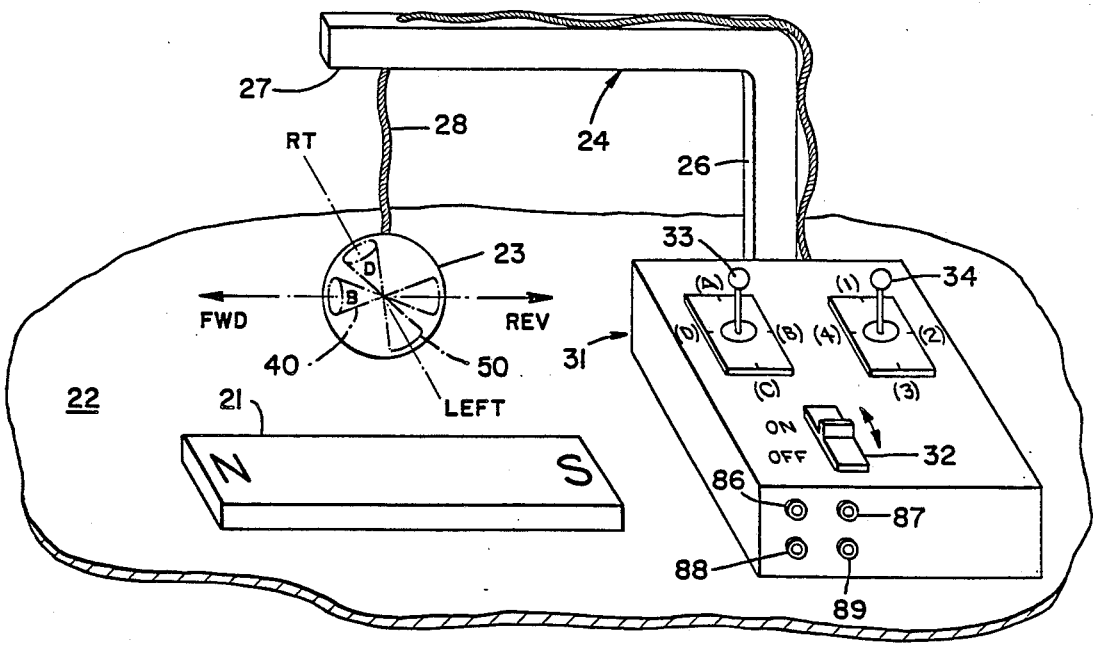
[57] **ABSTRACT**

A free flying magnetic levitator that is self stabilized and fully maneuverable for magnetic structure establishing an odd number of poles for interaction with another magnetic field having an even number of poles to produce linear motion instead of rotation without a guideway. Longitudinally wound coils produce the odd pole magnetic field for maximizing coupling with an even pole field such as the magentic field of the earth.

13 Claims, 6 Drawing Sheets