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Wang et al.

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(54) **MAGNETIC SUSPENSION DEVICE**

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(51) **Int. Cl.**
H01F 7/00 (2006.01)

(52) **U.S. Cl.** **335/296; 335/285; 361/144**

(58) **Field of Classification Search** **335/209-306;**
361/144

See application file for complete search history.

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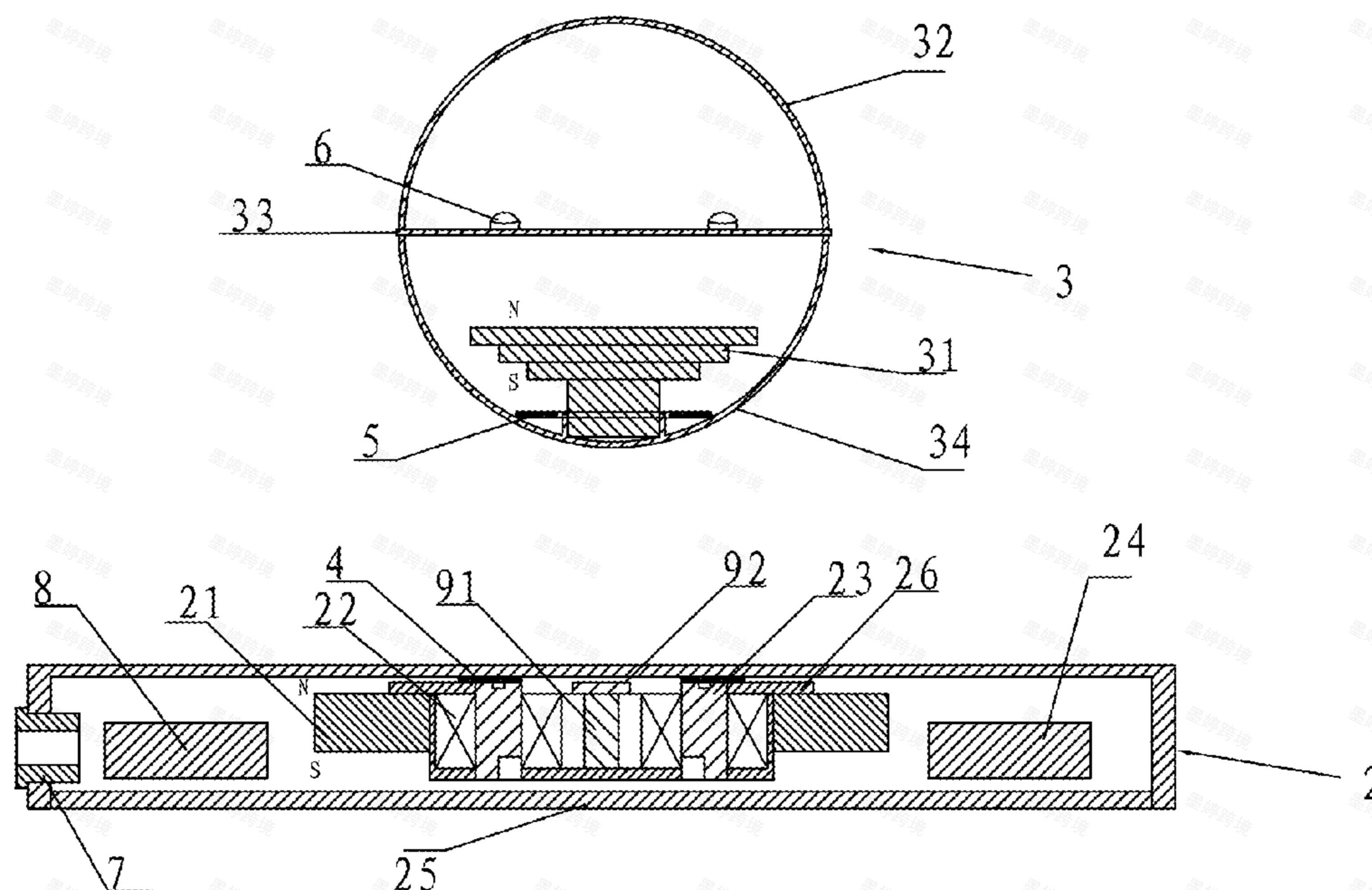
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(57) **ABSTRACT**

A magnetic suspension device comprises a magnetic base and a suspension body. The suspension body is suspended above the magnetic base. The suspension body is provided with a receiving coil and at least one luminous body. The magnetic base is provided with a transmitting coil. The transmitting coil transmits an AC signal to the receiving coil. The receiving coil converts the AC signal transmitted by the transmitting coil into electric energy and supplies the electric energy to the luminous body for emitting light. In the magnetic suspension device of the present invention, the transmitting coil is arranged at the magnetic base, and the receiving coil is arranged in the suspension body. Wireless power transmission is realized through the transmitting coil and the receiving coil, so, the luminous body arranged on the suspension body can emit light without any cell and external power supply. This wireless power transmission method can avoid the impact on the operation of the suspension body, which not only can ensure the favorable suspension effect of the suspension body, but also can make the suspension body emit light. The magnetic suspension device has a very good decorative effect, and can be widely used in fields such as toys, ornaments, advertisements, and so on.

9 Claims, 3 Drawing Sheets



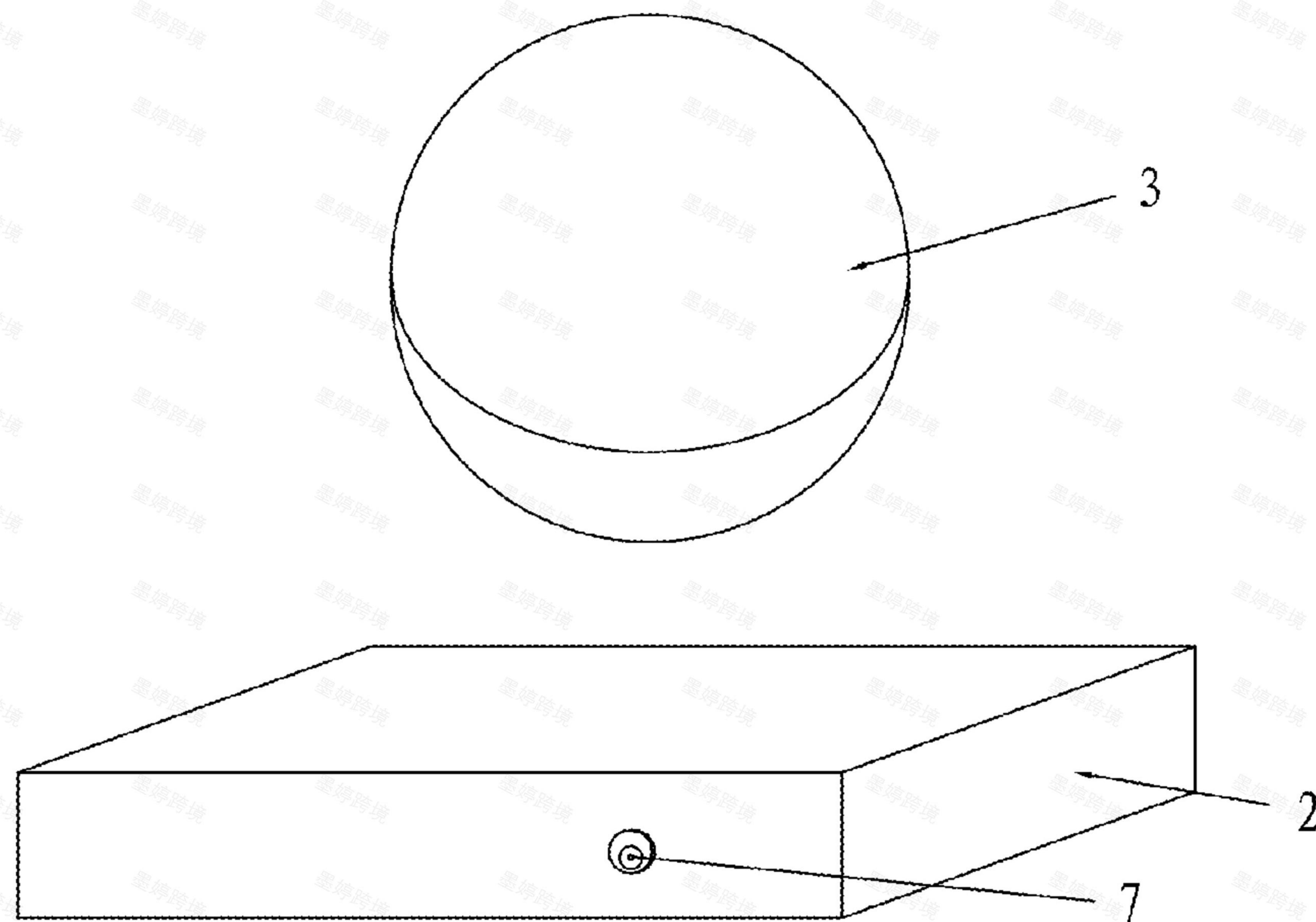


Fig. 1

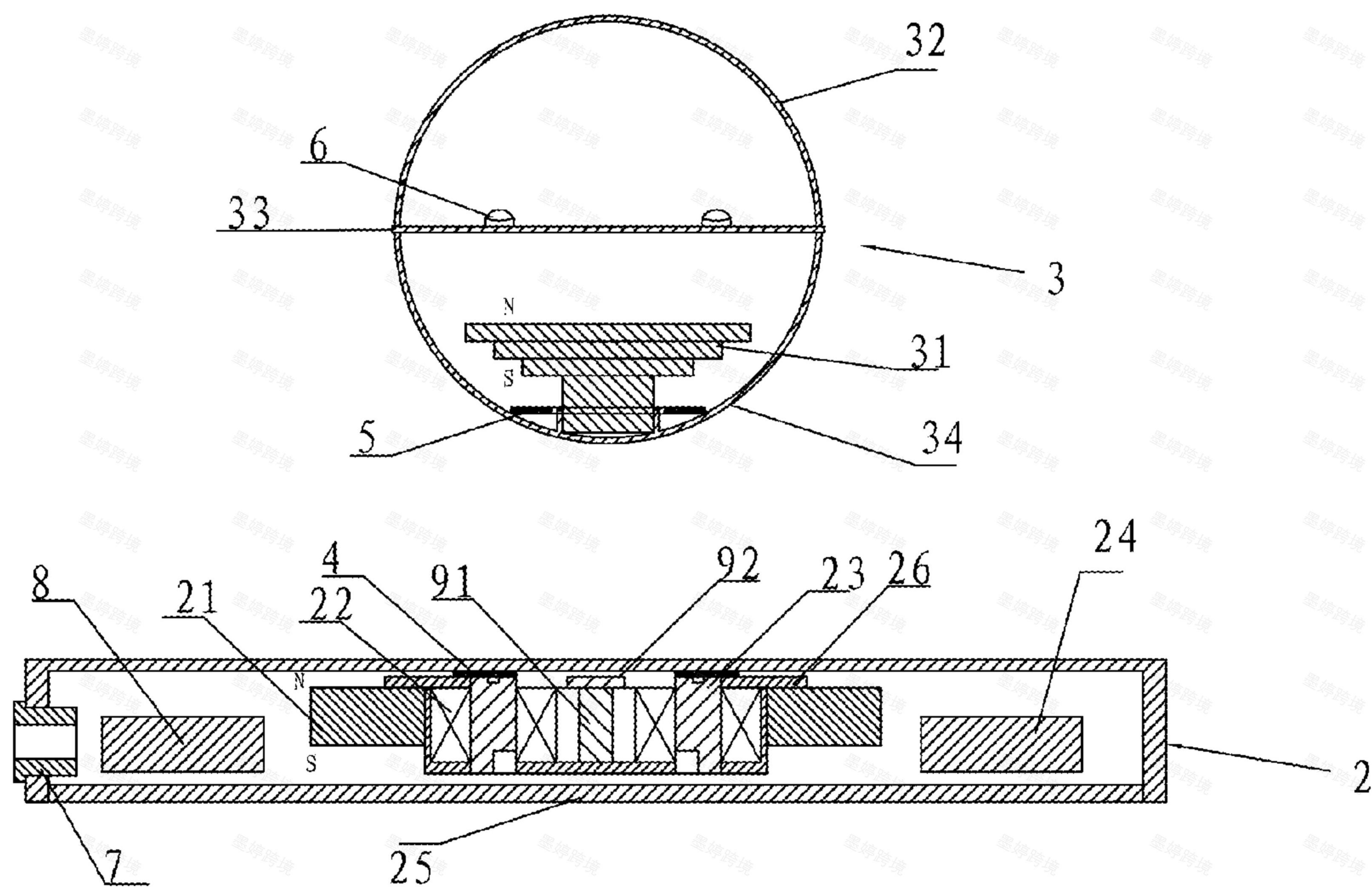


Fig. 2

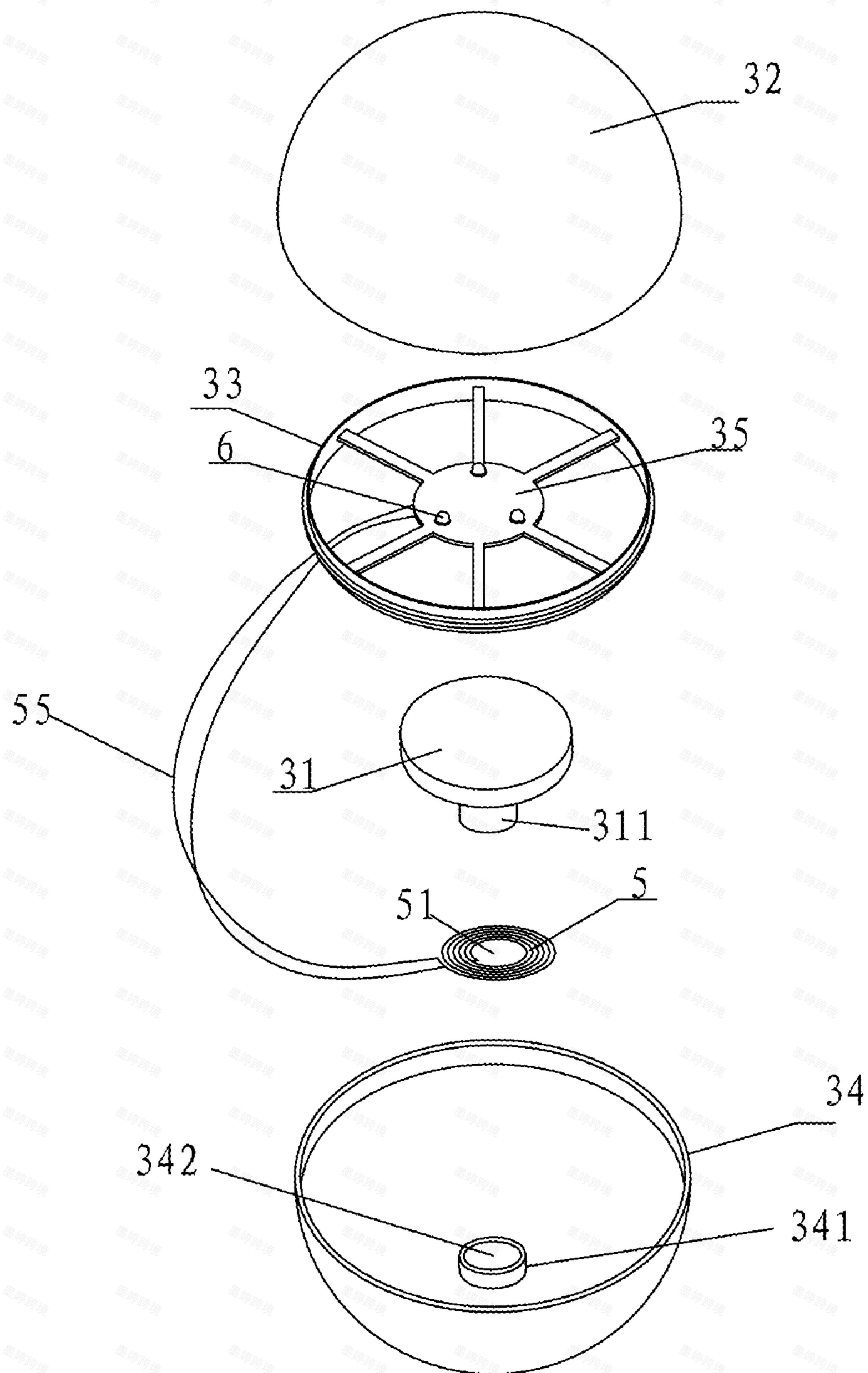


Fig. 3

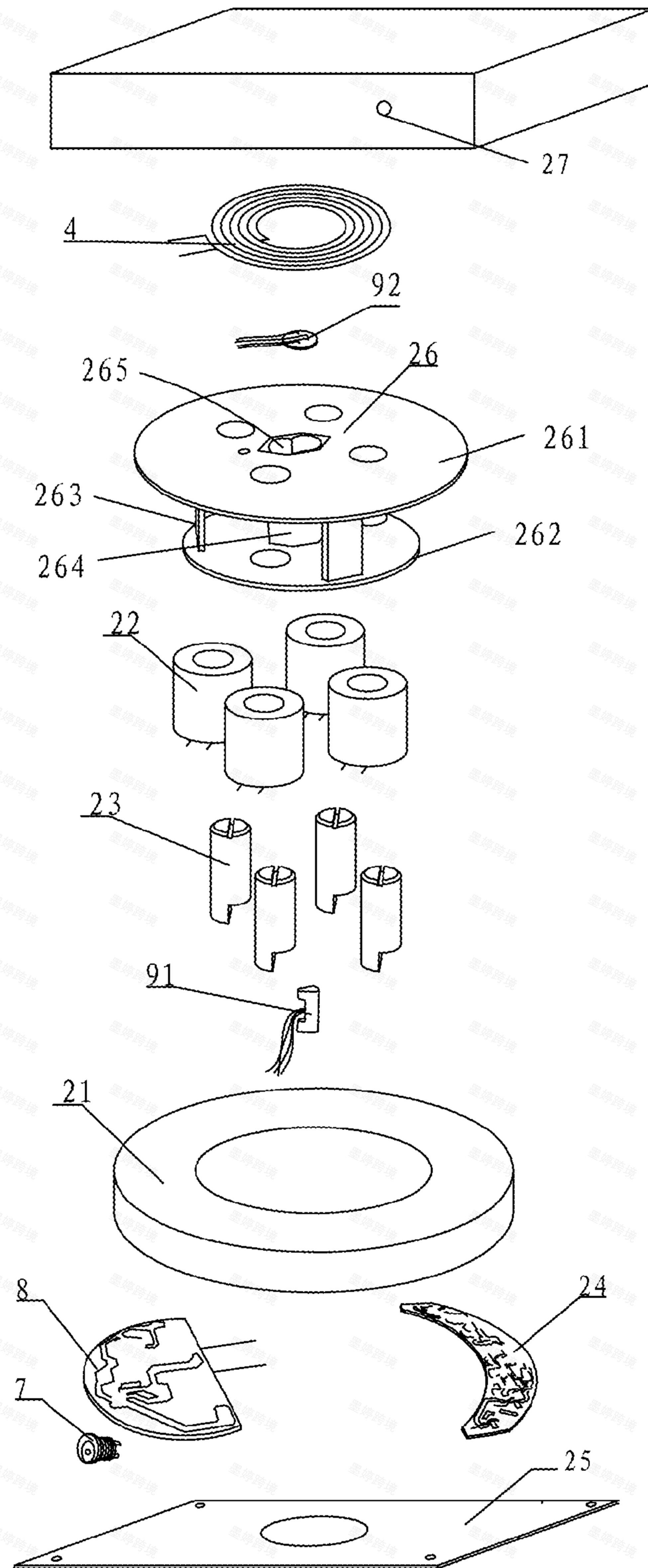


Fig. 4