WHAT IS CLAIMED IS:

1. A contactless power swivel comprising,

a first coil unit, connected to a floating structure, rotatable with the floating structure, to which a current is applied from a power supply unit provided at the floating structure;

a second coil unit, connected to a turret rotating relative to the floating structure, spaced apart from the first coil unit, to which a current is induced by a magnetic field formed by the first coil unit;

a cylindrical part, configured to support the first coil unit, provided outside a case part of the contactless power swivel and connected to the floating structure;

a round plate, configured to support the second coil unit, provided inside the case part and connected to the turret;

a first cover part, configured to cover the first coil unit, provided outside the case part and connected to the floating structure; and

a second cover part, configured to cover the second coil unit,

wherein the current induced to the second coil unit is supplied to the turret,

wherein a plurality of through holes is formed at the

cylindrical part to allow the first coil wound around the first coil unit to be inserted into and taken out,

wherein a plurality of through holes is formed at the round plate to allow the second coil wound around the second coil unit to be inserted into and taken out,

wherein an inner space defined by the cylindrical part, the round plate, the first cover part, and the second cover part is filled with insulating oil, and

wherein a plurality of sealing members are provided at the respectively through holes formed at the cylindrical part and the round plate to seal the case part.

2. The contactless power swivel of claim 1,

wherein the cylindrical part and the first cover part rotate with the floating structure when the floating structure rotates.

3. The contactless power swivel of claim 2, wherein the cylindrical part supports a lower end portion and a side portion of the first coil unit.

4. The contactless power swivel of claim 2, further comprising a plurality of bearing portions provided between the cylindrical part and the round plate and between the first cover part and the second cover part.

5. The contactless power swivel of claim 2, wherein the cylindrical part has a hollow portion where the first coil unit is accommodated, an open top, and a bottom surface having an opening at a central portion, and

the round plate is provided at the opening formed at the bottom surface of the cylindrical part and supports a lower end portion of the second coil unit.

6. The contactless power swivel of claim 5, wherein the first cover part is a disc-shaped member having an opening at a central portion and has a shape corresponding to a shape of the bottom surface of the cylindrical part, and

the second cover part is a disc-shaped member provided at the opening of the first cover part and has a shape corresponding to a shape of the round plate.

7. The contactless power swivel of claim 1, wherein the first coil unit includes a vertical member, a first coil wound around the vertical member, and an upper end portion and a lower end portion extending from both ends of the vertical member in a direction perpendicular to the vertical member, and

the second coil unit includes a cylindrical member, a second coil wound around the cylindrical member, and an

upper disc-shaped member and a lower disc-shaped member provided at both ends of the cylindrical member, a diameter of the upper disc-shaped member and a diameter of the lower disc-shaped member being greater than a cross sectional diameter of the cylindrical member.

8. The contactless power swivel of claim 2, wherein the cylindrical part and the first coil unit are spaced apart from each other by a predetermined distance, and the first coil unit is fixed to the cylindrical part while being connected to the cylindrical part via an insulator.

9. The contactless power swivel of claim 1, wherein two first coil units are spaced apart from each other at a right angle about the second coil unit, or three first coil units are spaced apart from each other at an angle of 120° about the second coil unit.