8. The current feed apparatus of claim 6, wherein the feed core comprises a plurality of cut units parallel with the width direction and therefore the feed core is divided into a plurality of core pieces.

9. The current feed apparatus of claim 8, wherein a thickness of the cut units of the feed core is greater than a thickness of the core pieces.

10. A current feed apparatus comprising:

a feed core including a main feed unit having a predetermined width and length, feed projection units projected from a cross section of the main feed unit, which is perpendicular to both a width direction and a length direction of the main feed unit, at a left end and a right end of the width direction in a same direction, accordingly being formed into a U shape; and

a feed line wound on a middle of the main feed unit with respect to a width direction of the main feed unit along a length of the feed core.

11. The current feed apparatus of claim 10, wherein the feed core comprises a plurality of cut units parallel with the width direction and therefore the feed core is divided into a plurality of core pieces.

~~12. The current feed apparatus of claim 11, wherein a thickness of the cut units of the feed core is similar to a thickness of the core pieces.~~

~~13~~12. The current feed apparatus of claim ~~12~~11, wherein intervals among the plurality of cut units are uniform.

~~14~~13. A current collecting apparatus comprising:

a collecting core including a main collecting unit having a predetermined width and length, and collecting projection units projected from a cross section of the main feed unit, which is perpendicular to both a width direction and a length direction of the main collecting unit ~~412~~ in the same direction at a left end and a right end of the width

direction, thereby being formed into an inverted U shape; and

a collecting line wound on the collecting core.

~~15~~14. The current collecting apparatus of claim ~~14~~13, wherein the collecting line is wound on the collecting projection units projected at the left end and the right end.

~~16~~15. The current collecting apparatus of claim ~~14~~13, wherein the collecting core comprises extension units extended in the width direction from ends of the collecting projection units projected at the left and the right end.

~~17~~16. The current collecting apparatus of claim ~~14~~13, wherein the current collecting apparatus is mounted to a lower part of a car.

~~18~~17. A power transmission ~~unit~~apparatus comprising:

the current feed apparatus according to any one of claim 1 to claim ~~13~~10; and

~~the~~a current collecting apparatus comprising:~~according to any one of claim 14 to claim 17~~,

a collecting core including a main collecting unit having a predetermined width and length, and collecting projection units projected from a cross section of the main feed unit, which is perpendicular to both a width direction and a length direction of the main collecting unit in the same direction at a left end and a right end of the width direction, thereby being formed into an inverted U shape; and

a collecting line wound on the collecting core,

wherein the feed projection units and the collecting projection units are projected to face each other.