

(12) United States Patent

Park et al.

(54) PORTABLE TERMINAL HAVING A WIRELESS CHARGER COIL AND AN ANTENNA ELEMENT ON THE SAME PLANE

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(58) Field of Classification Search See application file for complete search history.

(56)**References Cited**

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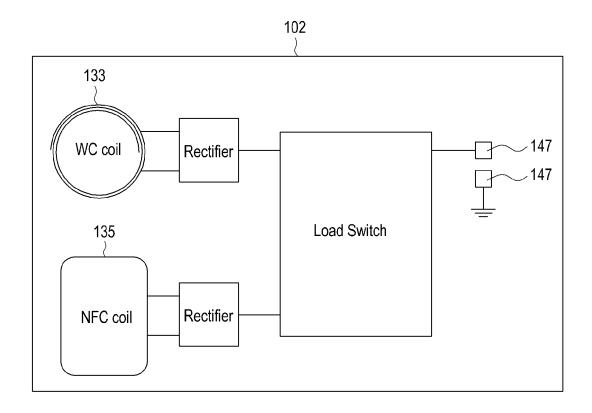
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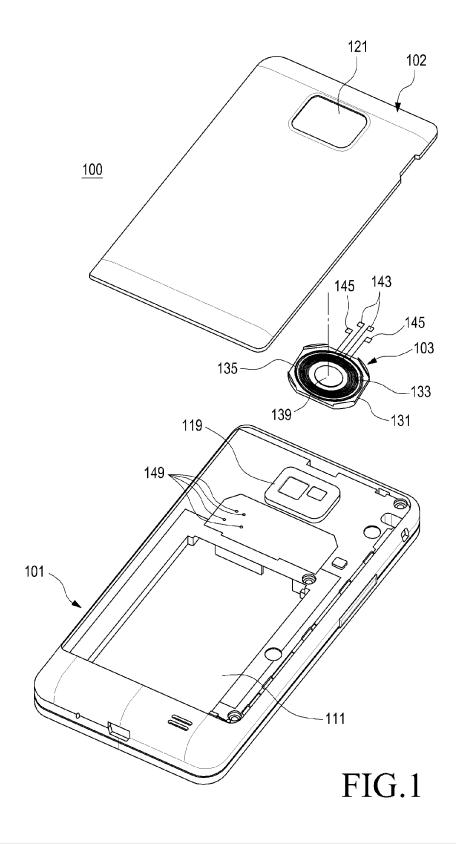
ABSTRACT

A portable terminal having a wireless charger coil and an antenna element on the same plane is provided, in which a shielding member is attached to an inner surface of an external part, a first coil is attached to one surface of the shielding member, facing the inner surface of the external part, and a second coil is attached to the one surface of the shielding member, surrounding the first coil on the same plane.

15 Claims, 4 Drawing Sheets









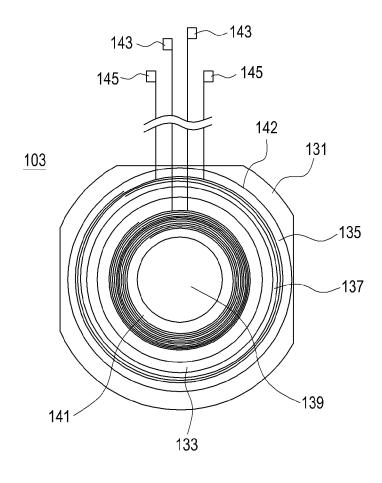


FIG.2

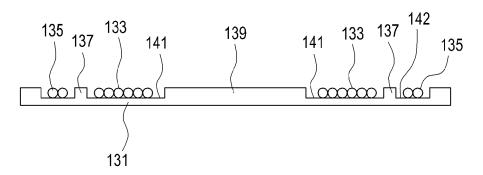
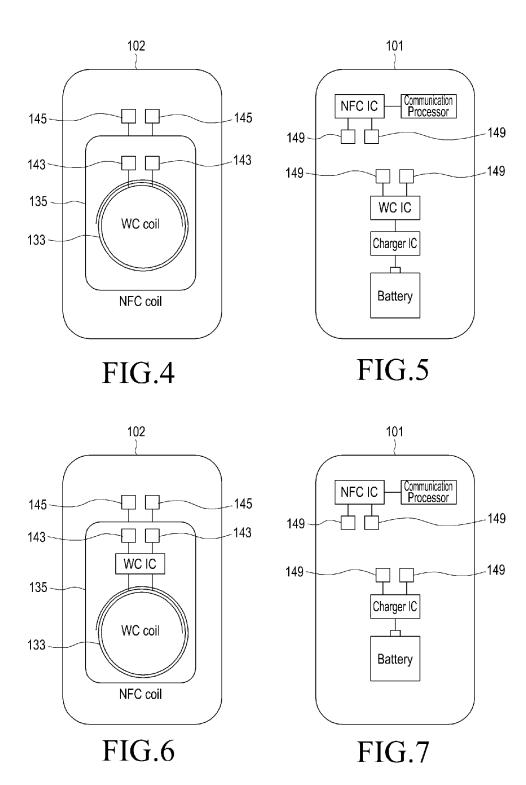


FIG.3





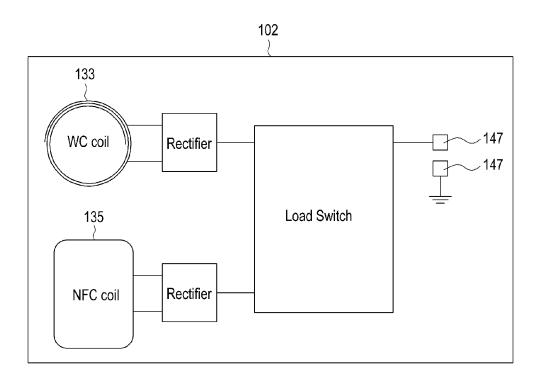


FIG.8

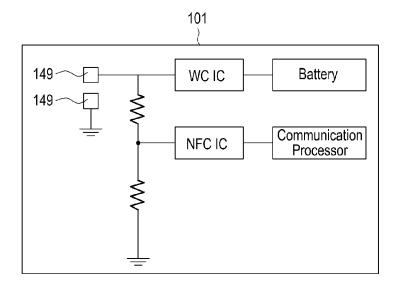


FIG.9



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