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Porter et al.

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(54) **ANTENNA FOR ELECTRIC METER AND METHOD OF MANUFACTURING THEREOF**

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(52) U.S. Cl. **343/719**; 324/142; 340/870.02;
340/870.03; 343/872

(58) **Field of Classification Search** None
See application file for complete search history.

(56) **References Cited**

To view the complete listing of prior art documents cited during the proceeding for Reexamination Control Number 90/011,547, please refer to the USPTO's public Patent Application Information Retrieval (PAIR) system under the Display References tab.

Primary Examiner—Anjan K. Deb

(57) **ABSTRACT**

For use with an electric meter chassis by having a dielectric housing protruding therefrom, an antenna for allowing electric meter circuitry within the chassis to communicate wirelessly through the dielectric housing and a method of manufacturing the same. In one embodiment, the antenna includes: (1) antenna elements, located within the dielectric housing and adapted to transmit and receive electromagnetic radiation and (2) a balance circuit, coupled to the antenna elements to cause the antenna elements to act as an antenna and coupleable to an unbalanced output port of a wireless communication circuit, that balances an impedance of the unbalanced output port thereby to balance the antenna.

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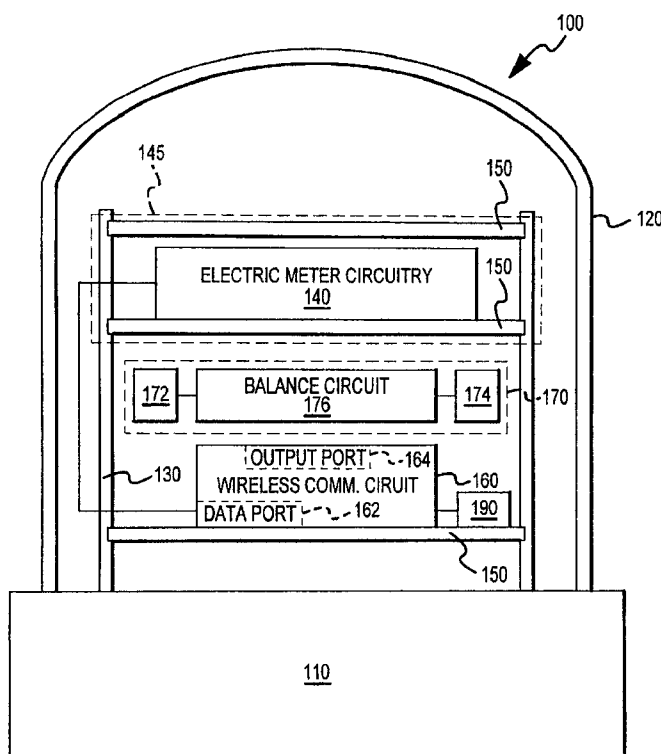
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(*) Notice: This patent is subject to a terminal disclaimer.

Related U.S. Application Data

(63) Continuation of application No. 09/040,113, filed on Mar. 17, 1998, now Pat. No. 6,181,294.

(51) **Int. Cl.**
G01D 4/00 (2006.01)
H01Q 9/04 (2006.01)
H01Q 9/16 (2006.01)
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EX PARTE
REEXAMINATION CERTIFICATE
ISSUED UNDER 35 U.S.C. 307

NO AMENDMENTS HAVE BEEN MADE TO
THE PATENT

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AS A RESULT OF REEXAMINATION, IT HAS BEEN
DETERMINED THAT:

5 The patentability of claims 1-27 is confirmed.

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