

- (54) **TRACKING SYSTEM USING MINIATURIZED CONCEALABLE COMMUNICATIONS MODULE**
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- (73) Assignee: **Veridian ERIM International, Inc., Ann Arbor, MI (US)**
- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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- (22) Filed: **May 16, 2000**

Related U.S. Application Data

- (63) Continuation of application No. 08/321,941, filed on Oct. 12, 1994, now Pat. No. 6,121,922.
- (51) **Int. Cl.**⁷ **G01S 5/02; H04B 7/185**
- (52) **U.S. Cl.** **342/357.1; 342/357.09; 342/419; 701/213**
- (58) **Field of Search** **342/357.09, 357.1, 342/419; 701/213**

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(57) **ABSTRACT**

A tracking system uses a miniaturized geographic position determination and communications module, preferably in the form of a thin capsule, enabling the enclosure to be hidden in very small spaces, including personal concealment. Electronic circuitry and a thin, rechargeable battery are contained within the enclosure, the circuitry including a global positioning satellite receiver, a communications transceiver, and a controller. The controller causes the global positioning satellite receiver to receive and decode a signal relating to the geographic position of the module; cause the communications transmitter to communicate the geographic position information to a remote location; and disable the global positioning satellite receiver and communications transceiver when not in use so as to conserve power.

9 Claims, 5 Drawing Sheets

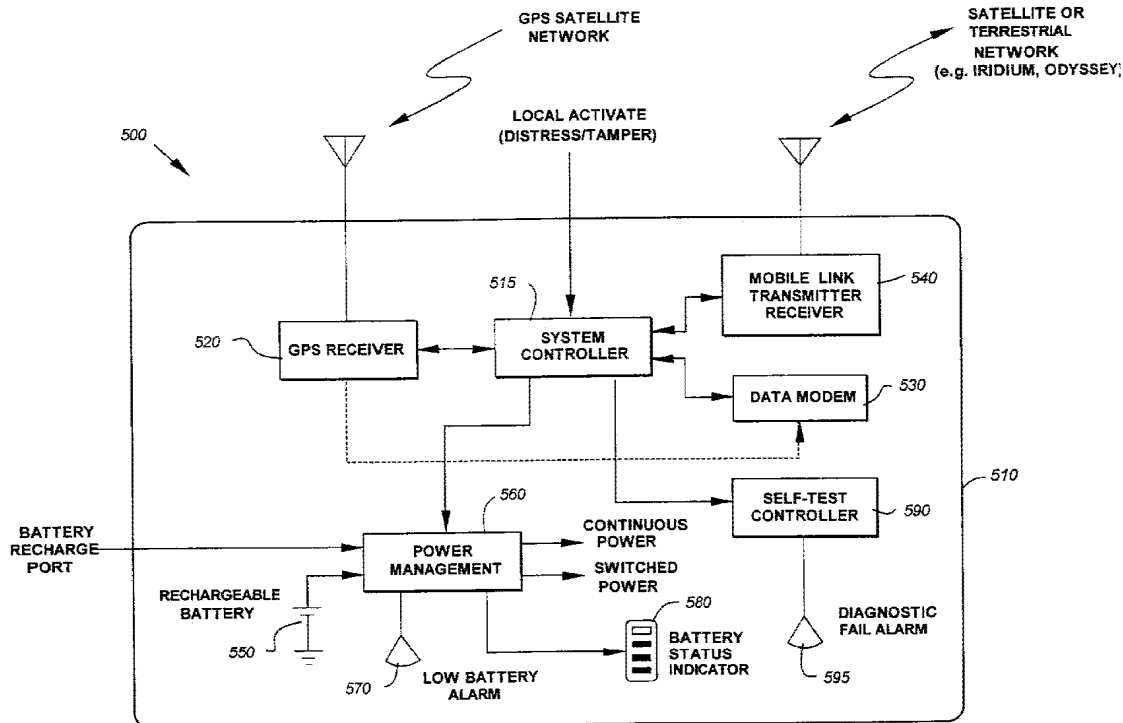
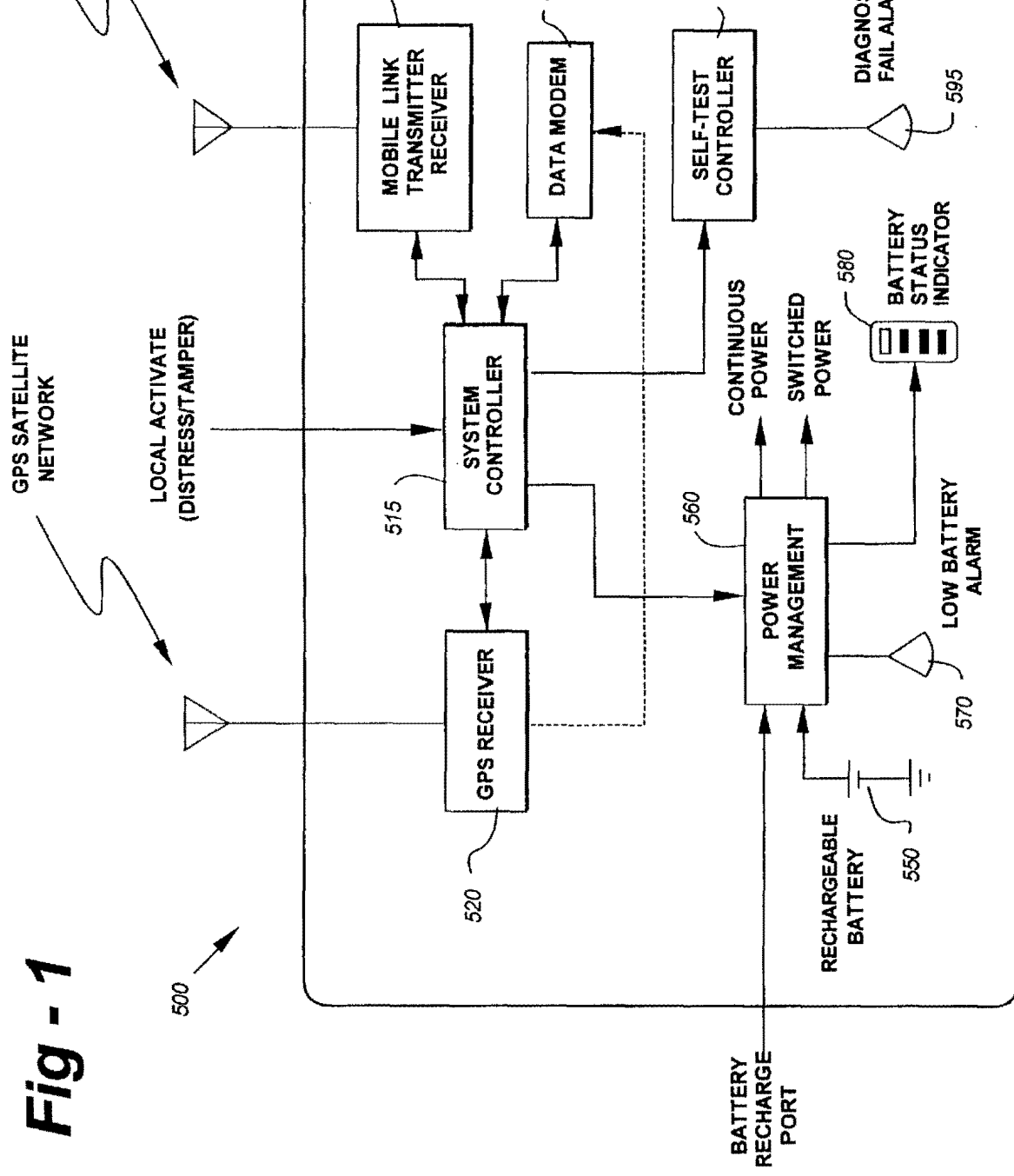


Fig - 1



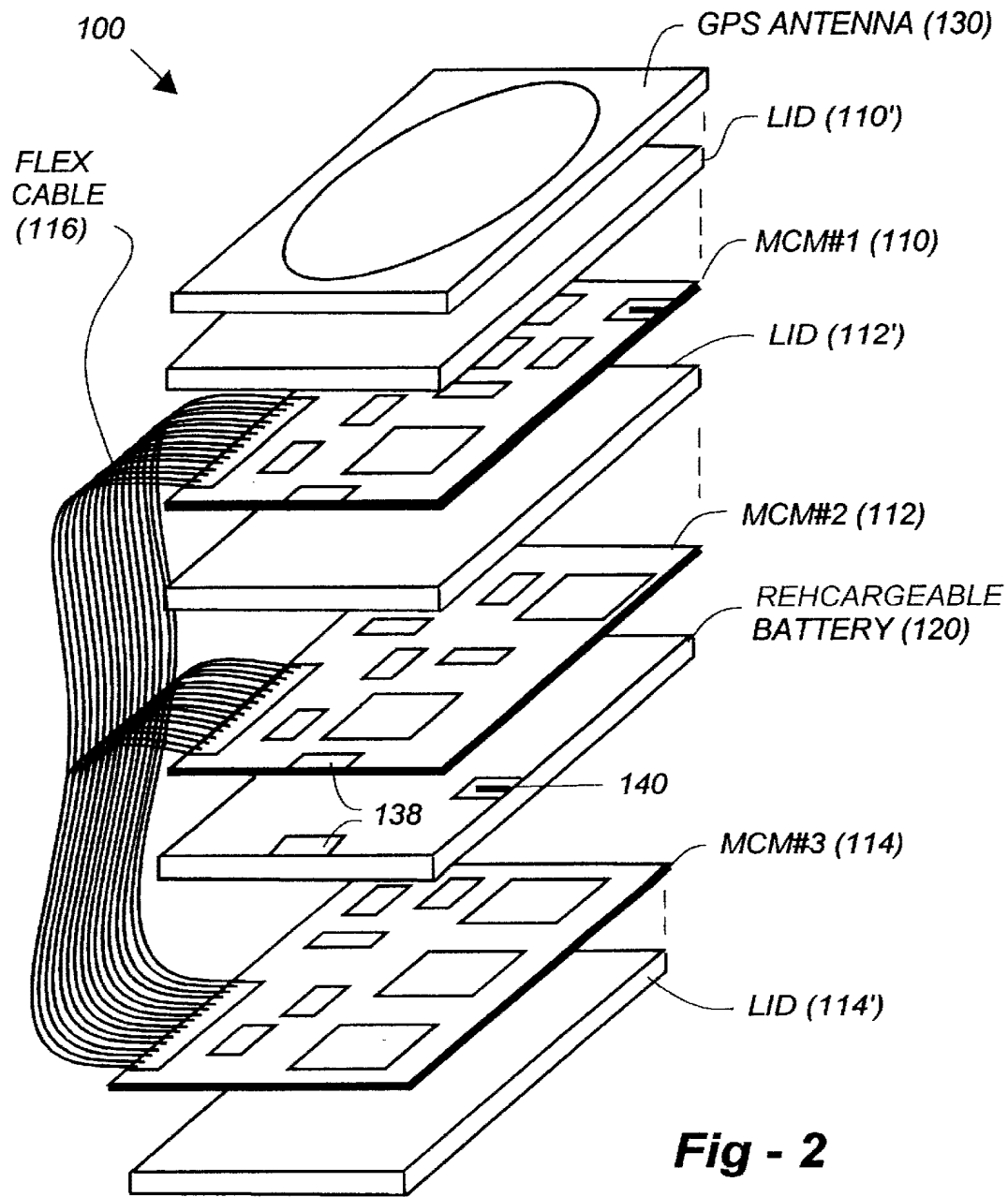


Fig - 2

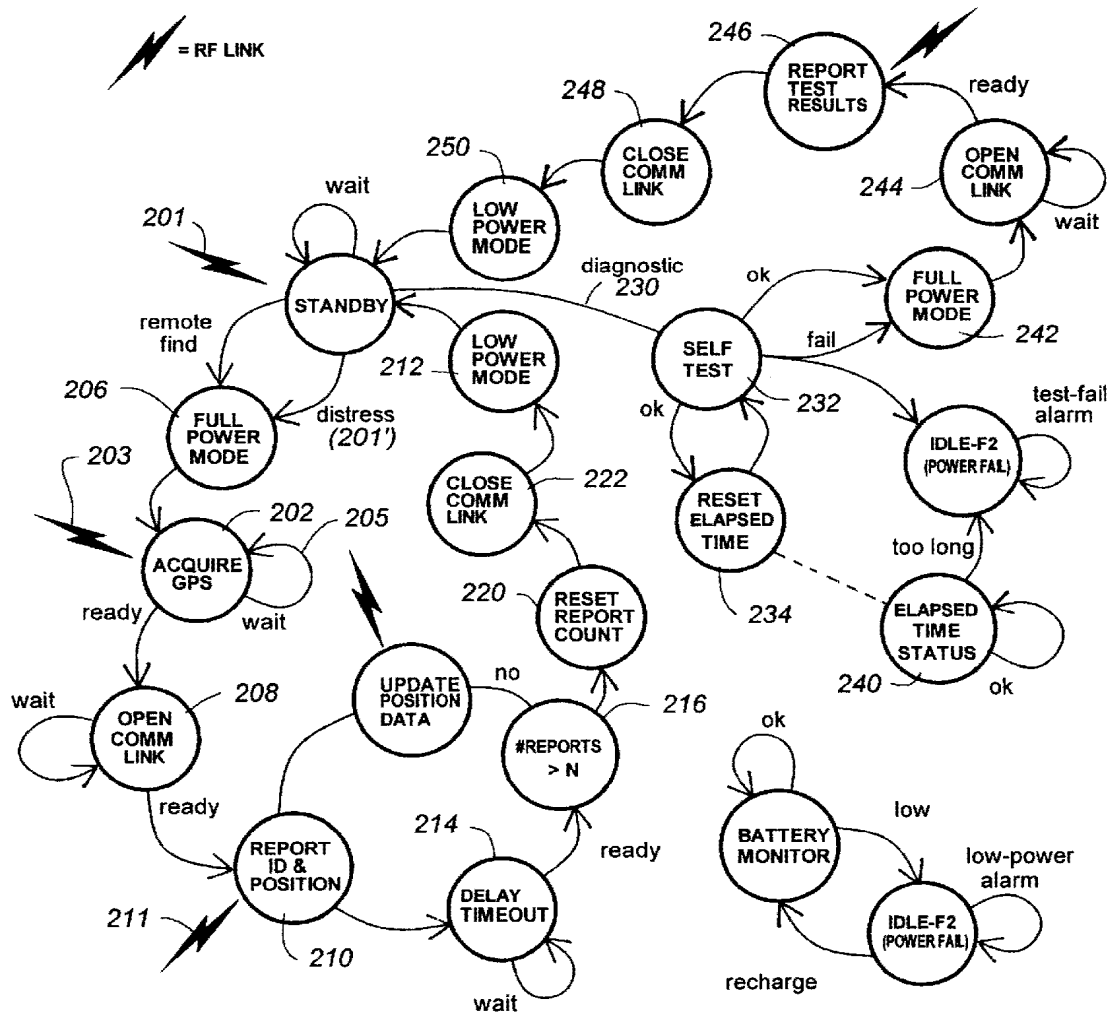


Fig - 3

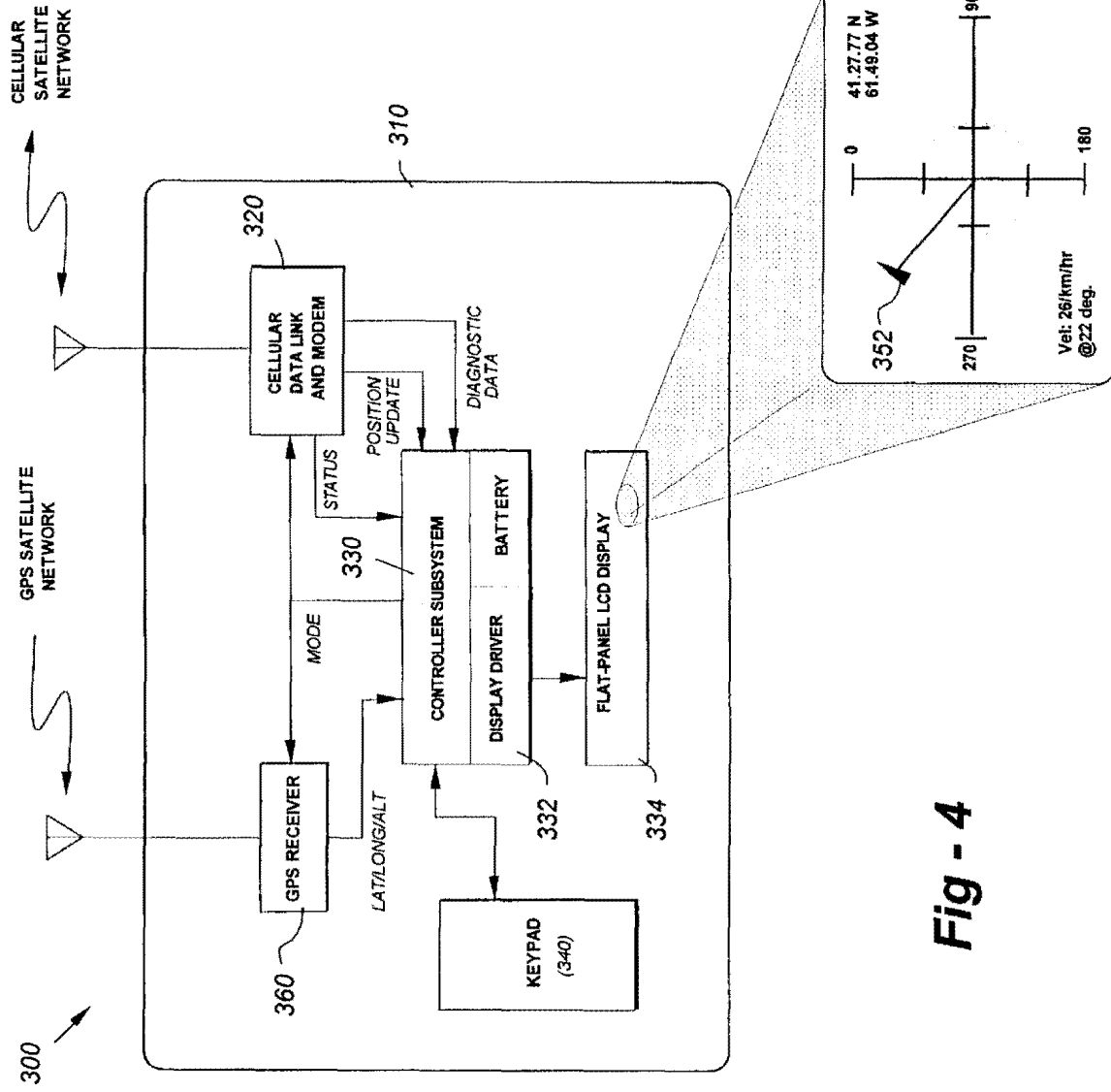


Fig - 4

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