



(12) **United States Patent**  
**Scalisi et al.**

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(54) **APPARATUS AND METHOD FOR DETERMINING LOCATION AND TRACKING COORDINATES OF A TRACKING DEVICE**

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(57) **ABSTRACT**

A device and method to monitor location coordinates of an electronic tracking device are disclosed here. The device includes transceiver circuitry to receive at least one portion of a receive communication signal comprising location coordinates information; accelerometer circuitry to measure displacements of the portable electronic tracking device; a battery power monitor configured to selectively activate and deactivate at least one portion of the transceiver circuitry and location tracking circuitry; and processor circuitry configured to process the at least one portion of the receive communication signal. The method includes receiving at transceiver circuitry of a portable electronic tracking device at least one portion of a receive communication signal comprising location coordinates information; measuring displacements of the portable electronic tracking device; activating and deactivating at least one portion of the transceiver circuitry and location tracking circuitry; and processing the at least one portion of the receive communication signal using processor circuitry.

**Related U.S. Application Data**

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(51) **Int. Cl.**  
**G08B 1/08** (2006.01)

(52) **U.S. Cl.**  
USPC ..... **340/539.13**

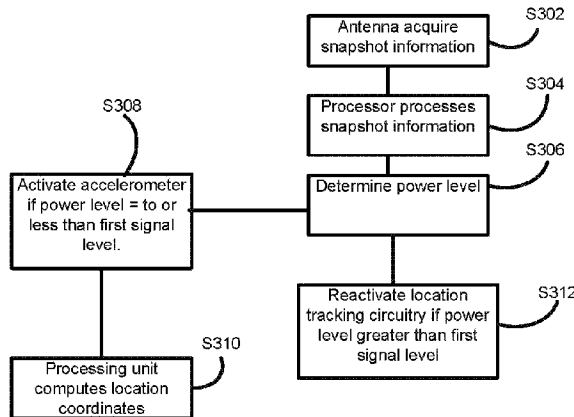
(58) **Field of Classification Search** ..... 340/539.13, 340/539.21, 686.1, 636.1; 701/400  
See application file for complete search history.

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**24 Claims, 3 Drawing Sheets**



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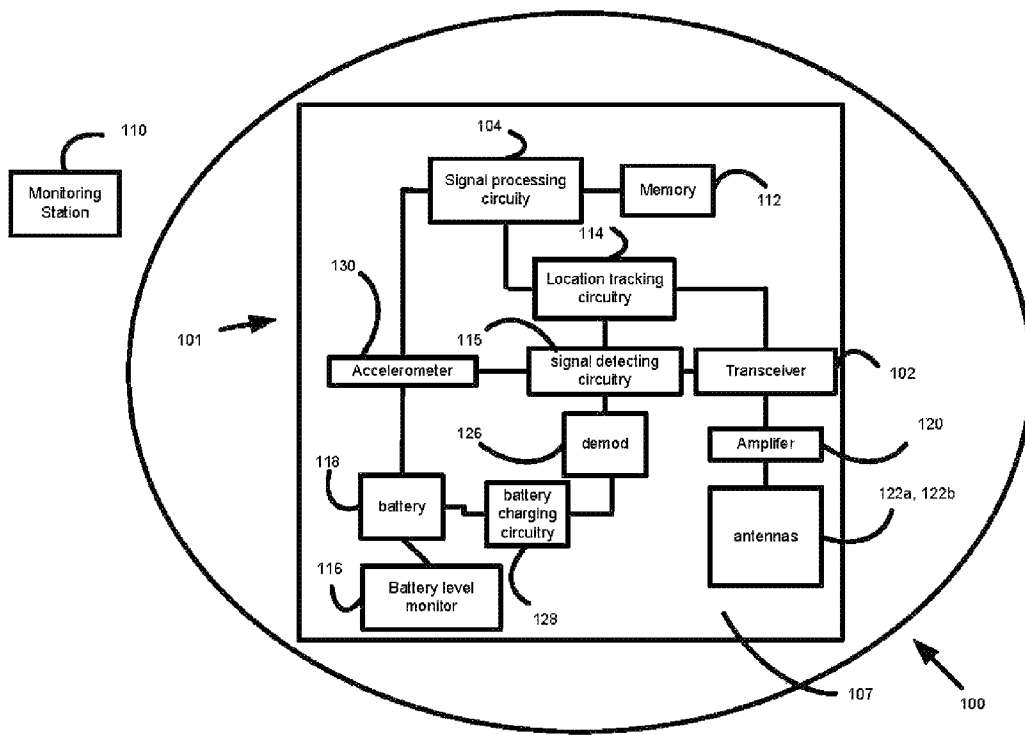


Figure 1

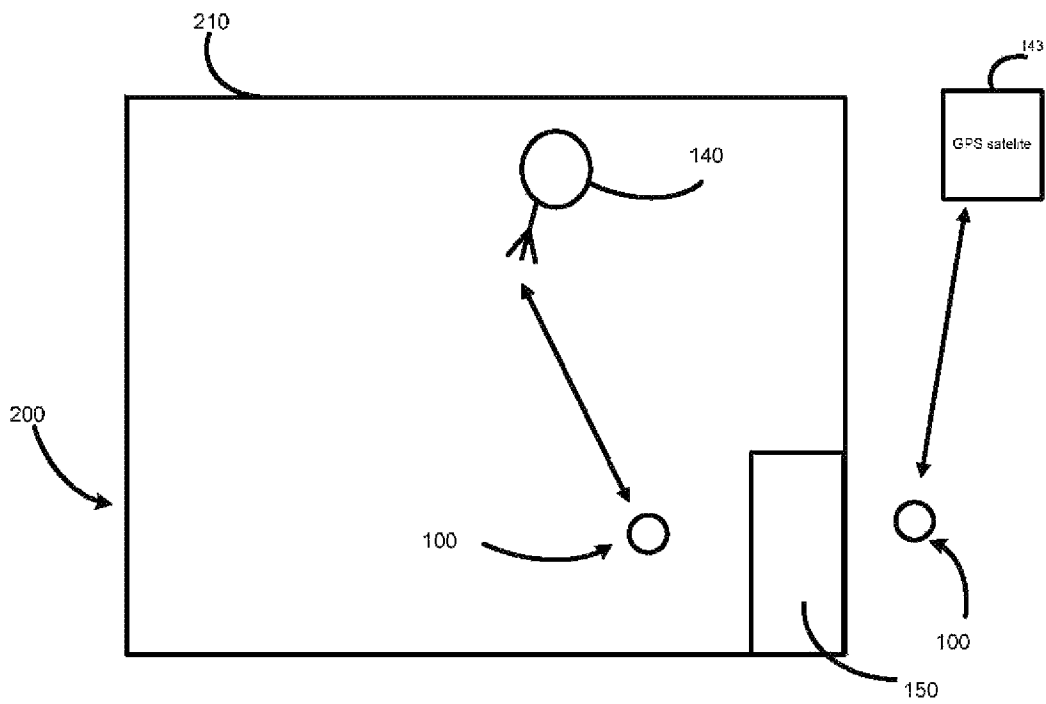


Figure 2

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