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Hum et al.

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(54) **SHORT RANGE COMMUNICATION SYSTEM**

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(*) Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 26 days.

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(51) **Int. Cl.⁷** **G08B 23/00**

(52) **U.S. Cl.** **340/573.4; 340/572.1; 340/573.1**

(58) **Field of Search** **340/539.1, 568.1, 340/572.1, 573.1, 573.4, 691.3, 10.1, 5.8, 825.36, 825.49, 825.69, 573.7, 10.2, 10.3, 10.6, 10.31; 342/42, 44, 51**

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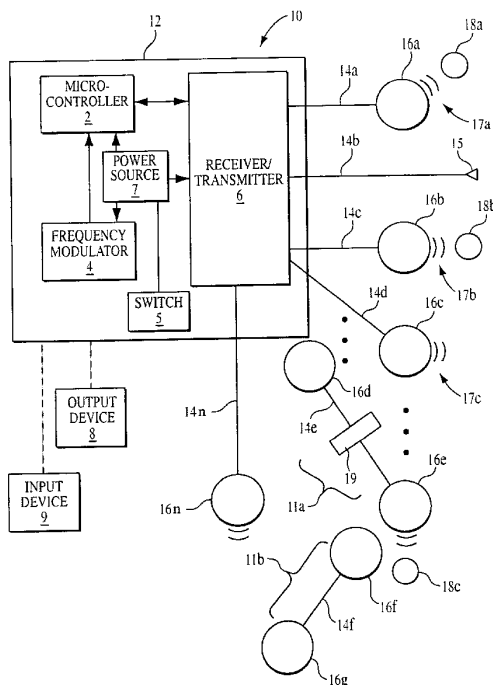
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(57) **ABSTRACT**

Short range communication systems and techniques are described. In an implementation an interrogator held near a person interrogates multiple transponders and receives information separately from the transponders. The interrogator and/or the transponders may be held in an article of clothing or in a personal effect of the person. The transponders may transmit identifying information and/or information associated with the states of the articles of clothing or personal effects of the person. Such a system enables the clothes worn by a person to communicate with a plurality of items and obtain useful information. In addition, a network system may be configured so that any particular transponder may communicate with another transponder or group of transponders of other locales to activate functions, cause actions or otherwise share data and/or information.

32 Claims, 10 Drawing Sheets



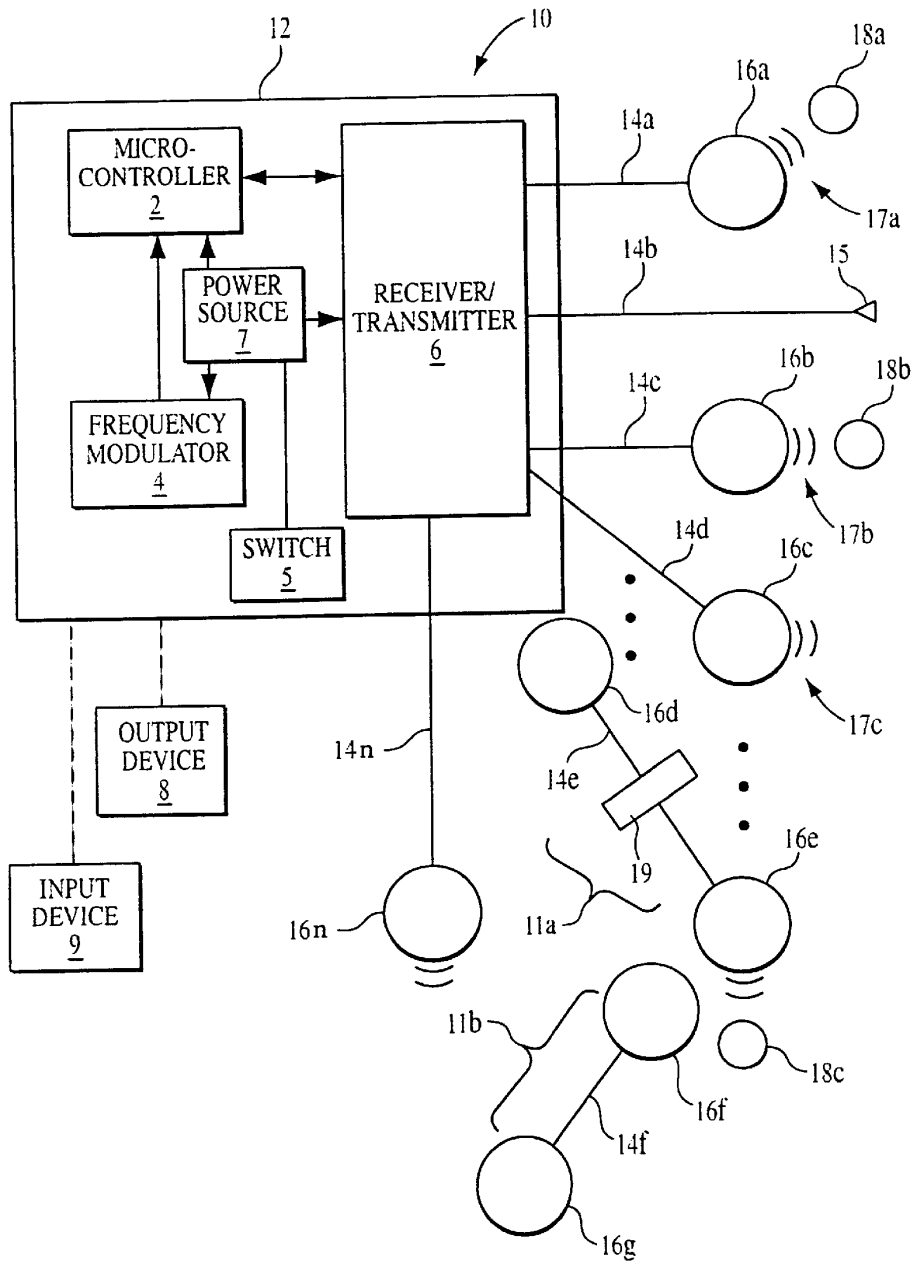


FIG. 1

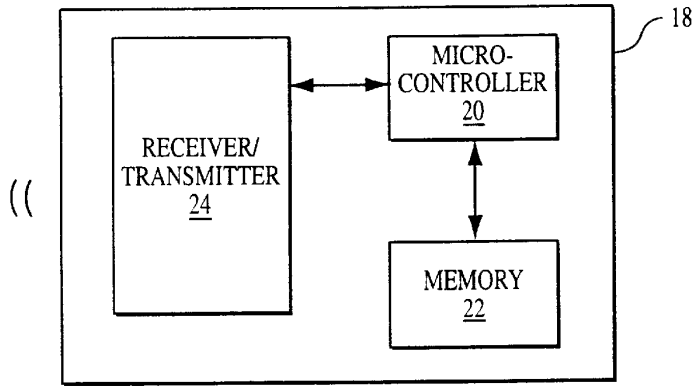


FIG. 2A

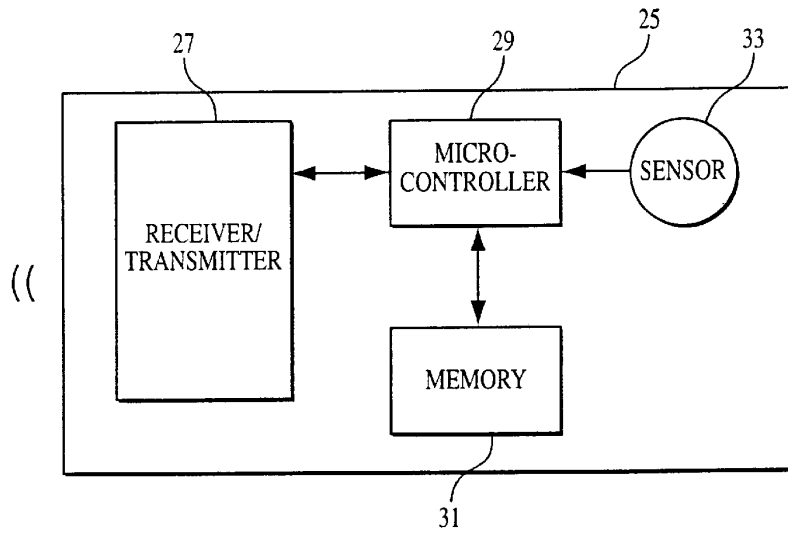


FIG. 2B

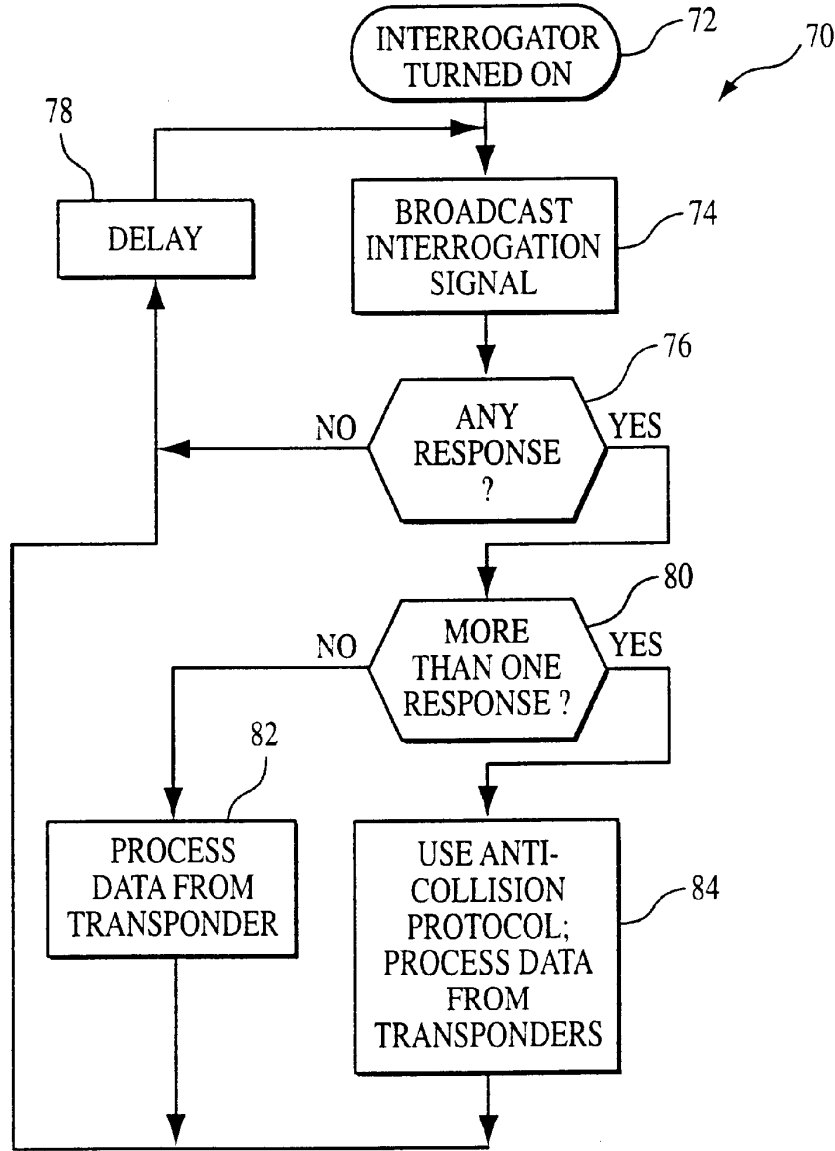


FIG. 3A

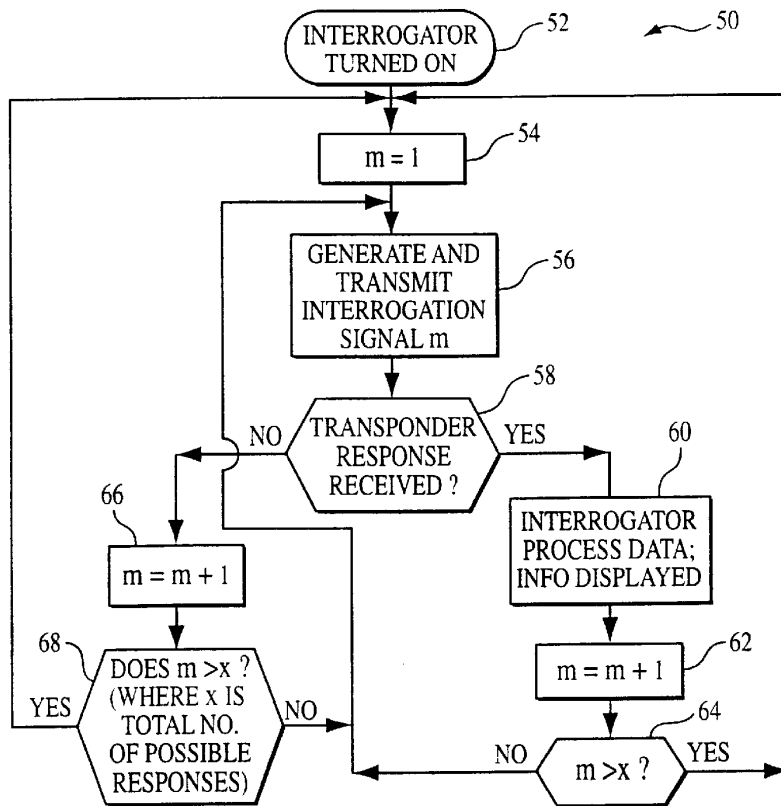


FIG. 3B

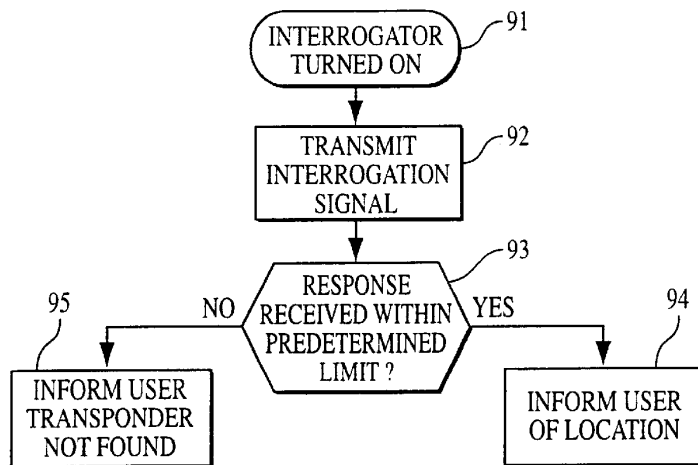


FIG. 3C

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