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Lemelson et al.

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[54] PERSONAL EMERGENCY, SAFETY WARNING SYSTEM AND METHOD

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[58] Field of Search 340/539, 531, 340/825.36, 825.49, 573.1; 128/903, 904; 600/300; 342/357, 457; 379/37, 38; 702/19

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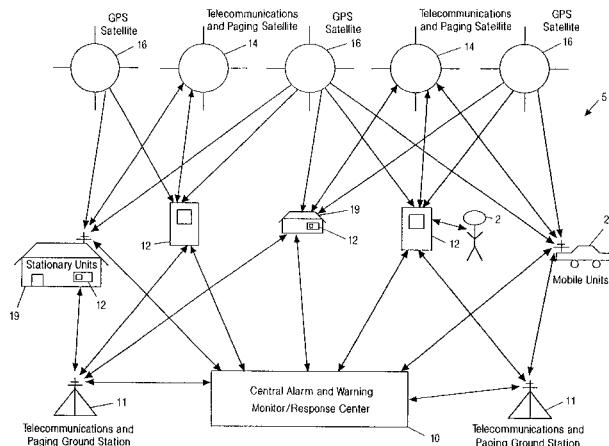
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[57] ABSTRACT

A comprehensive system and method for monitoring a geographic person location, periodically warning a person of emergency situations in the geographic location, and transmitting requests for assistance in emergency situations. The system comprises a warning unit 12 that is carried by the person or that is located in mobile units 20 or in buildings or houses 19. The warning unit 12 includes a geographic satellite receiver 38, a receiver circuit that receives broadcast warning signals defining dangerous situations and geographic locations of the situations, a computer controller including a processor 42 and a memory 44, an alarm indicator 64 or 66 that indicates when the person is in danger, and a transmission circuit that generates and transmits signals requesting assistance and signals warning of the dangerous situations in a vicinity of the person carrying the portable warning unit 12 along with the current geographic location of the person. The system further comprises a command center 10. The command center 10 includes a database computer 102 having a database storage unit 104, a transmitter for broadcasting signals to the unit(s) 12, a receiver for receiving signals, a transmitter for transmitting signals to emergency response units and centers, and other such communication devices. The system uses the unit(s) 12 to monitor and communicate with the person using it. The unit(s) 12 interfacingly communicate with the command center 10. Signals indicative of a dangerous situation and a geographic situation location are transmitted from the command center 10 to the unit(s) 12. The geographic person location is compared with the geographic situation location indicated in the received signal from the command center 10. Expert system rules are used to determine the dangerous situation and a degree(s) of danger index for the person(s) near or at the geographic situation location.

43 Claims, 9 Drawing Sheets



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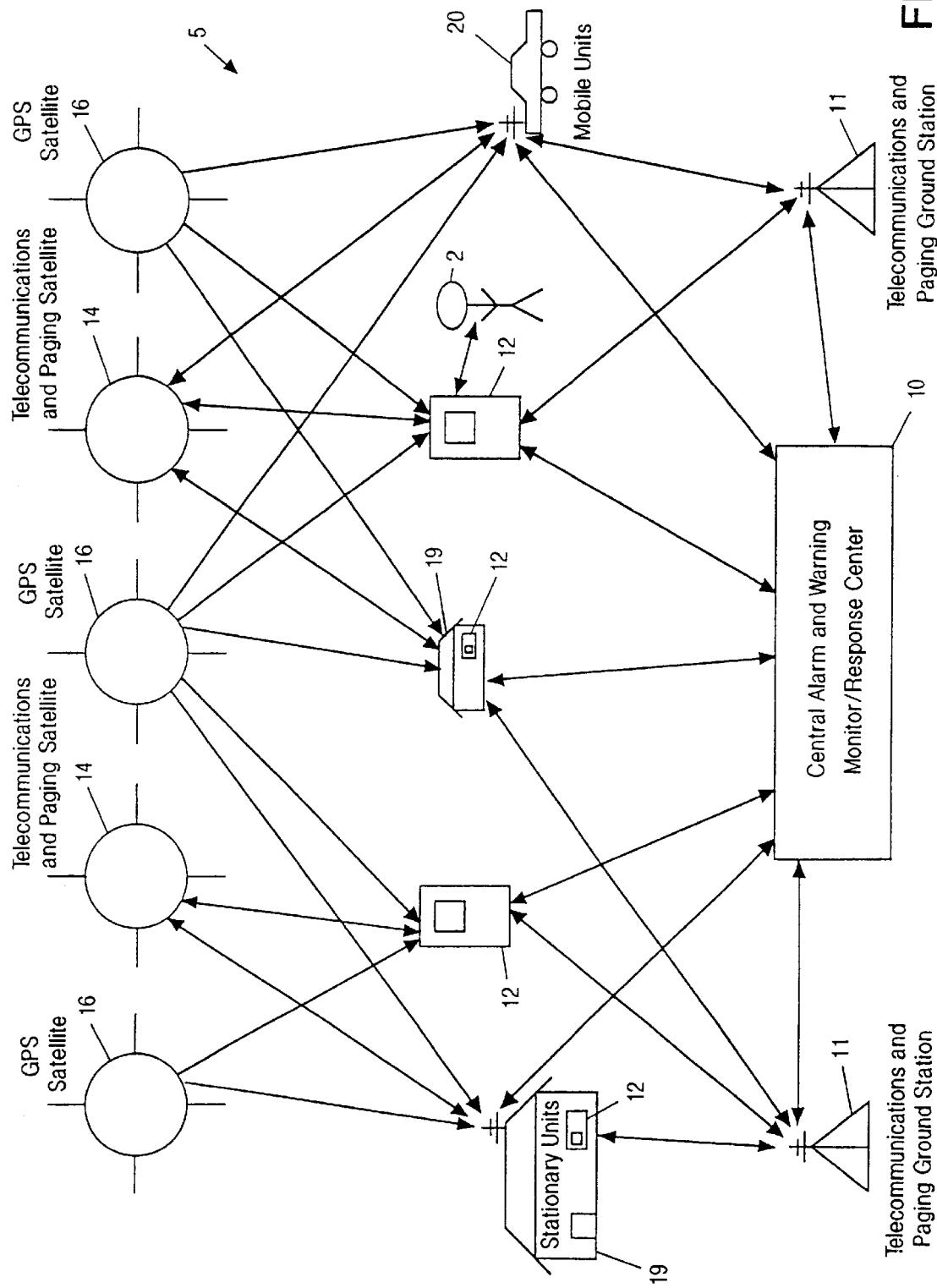
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FIG. 1



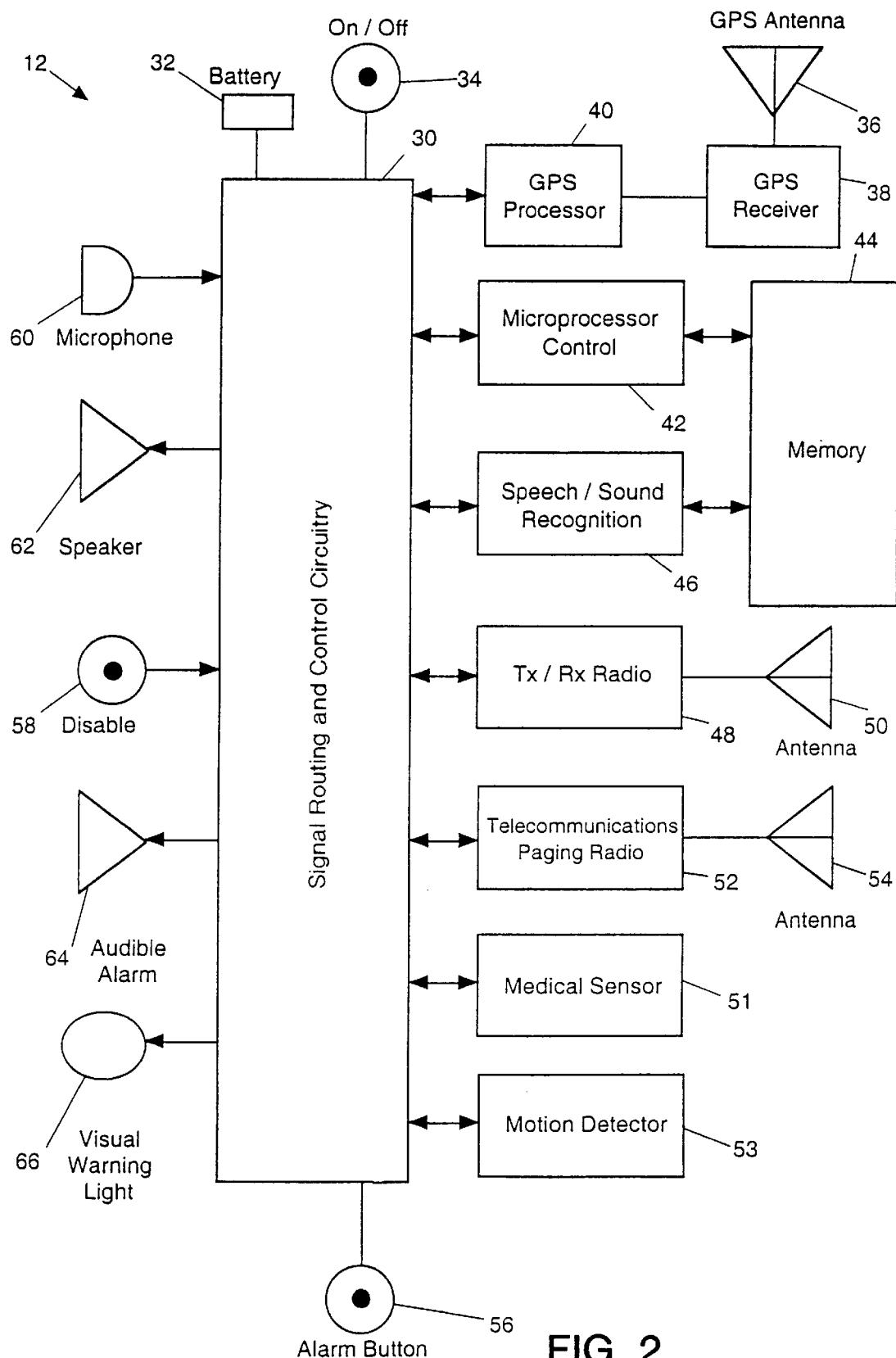
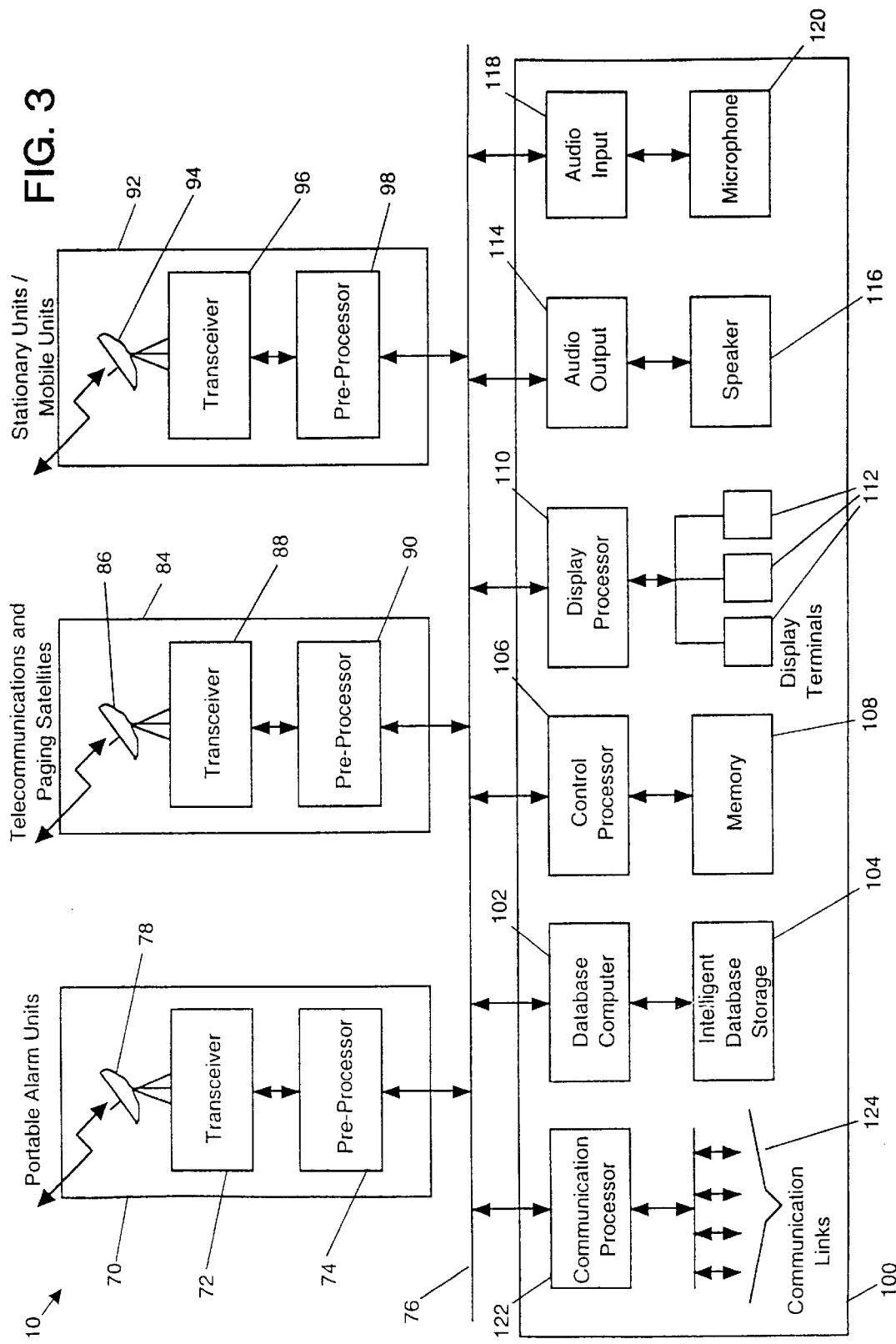


FIG. 2

FIG. 3

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