

A TWO-WAY PAGING SYSTEM AND APPARATUS

ABSTRACT

Paging systems typically include a network of ground stations or orbiting satellites equipped with transmitters and antennas for transmitting paging messages to small, battery-operated paging receivers that are worn about the person, known as pagers. Conventional pagers are receive only devices and the network receives no confirmation that paging has been successful. The present invention includes the provision of two-way pagers that contain a transmitter for transmitting an acknowledgement confirming reception of a paging message and a network of receiving stations able to receive said acknowledgements. The network makes use of advanced phased-array antenna signal processing techniques to render the return link operable with much less transmitter power in the portable unit than employed by the base station.

Figure 1