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(54) Title: **METHOD AND APPARATUS FOR ANTENNA REALIGNMENT IN A MOBILE RADIOTELEPHONE USING AN INJECTED AUDIO SIGNAL**

(57) Abstract

A mobile radiotelephone injects an audible alignment signal which is a function of the orientation of the radiotelephone antenna, into the audible radiotelephone communications. The audible alignment signal prompts the radiotelephone user to reorient the radiotelephone antenna for improved alignment with the source of radiotelephone communications. The audible alignment signal is preferably a function of the received signal strength of the radiotelephone communications. The audible alignment signal is preferably artificial noise which is injected in the radiotelephone loudspeaker along with the radiotelephone communications signal, to thereby restore subjective graceful degradation behavior to the received radiotelephone communications. Artificial noise injection is preferably used with coded digital radiotelephone systems which do not audibly degrade until a threshold is reached, below which communications are suppressed. Artificial noise injection may also be used with variable power base stations.

