

- [54] **METHOD AND APPARATUS FOR CONTROLLING A POWER LEVEL OF A BASE STATION OF A WIRELESS COMMUNICATION SYSTEM** 5,003,619 3/1991 Morris et al. 455/69
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[21] Appl. No.: **354,297**

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[57] **ABSTRACT**

Related U.S. Application Data

After setting a base station to a transmit power level (12) which provides a signal at a subscriber unit having a target quality level, a fading characteristic of a communication channel between the subscriber unit and a base site is measured (13). The fading characteristic is then compared with a threshold value (14). The measuring (13) and comparing (14) are repeated until the fading characteristic crosses a threshold (15). Once the fading characteristic crosses the threshold for a receive Eb/No level that is representative of a e.g. static fading condition, the base transmit power that is transmitted to the subscriber is increased by a predetermined amount in anticipation of the need for an increased Eb/No for the case of a faded signal (61). The determination of the fading characteristic and threshold comparison may be performed at either the subscriber unit or the base station.

[63] Continuation-in-part of Ser. No. 16,446, Feb. 11, 1993, abandoned.

[51] Int. Cl.⁶ **H04B 7/00**

[52] U.S. Cl. **455/69; 455/52.1; 455/56.1; 455/63; 455/67.1**

[58] **Field of Search** 455/69, 70, 52.1, 455/52.3, 65, 54.1, 54.2, 67.1, 89, 83, 67.6, 67.4, 63, 127, 226.1, 226.2, 226.3

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7 Claims, 4 Drawing Sheets

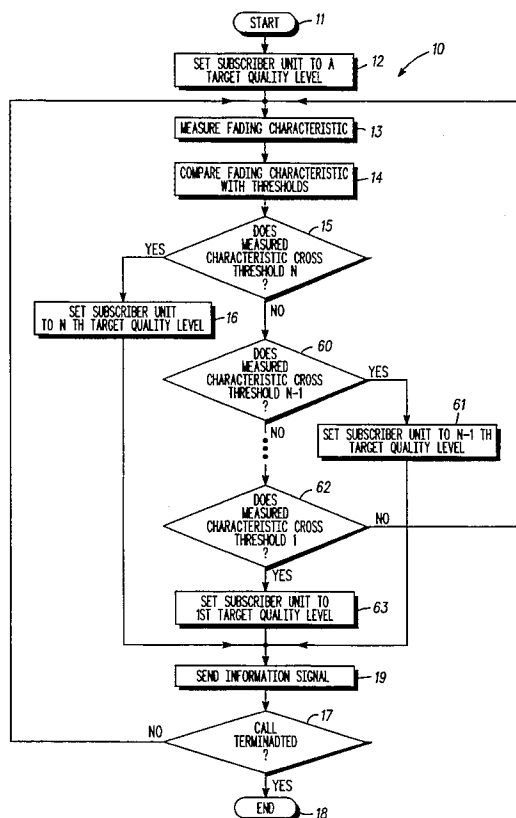
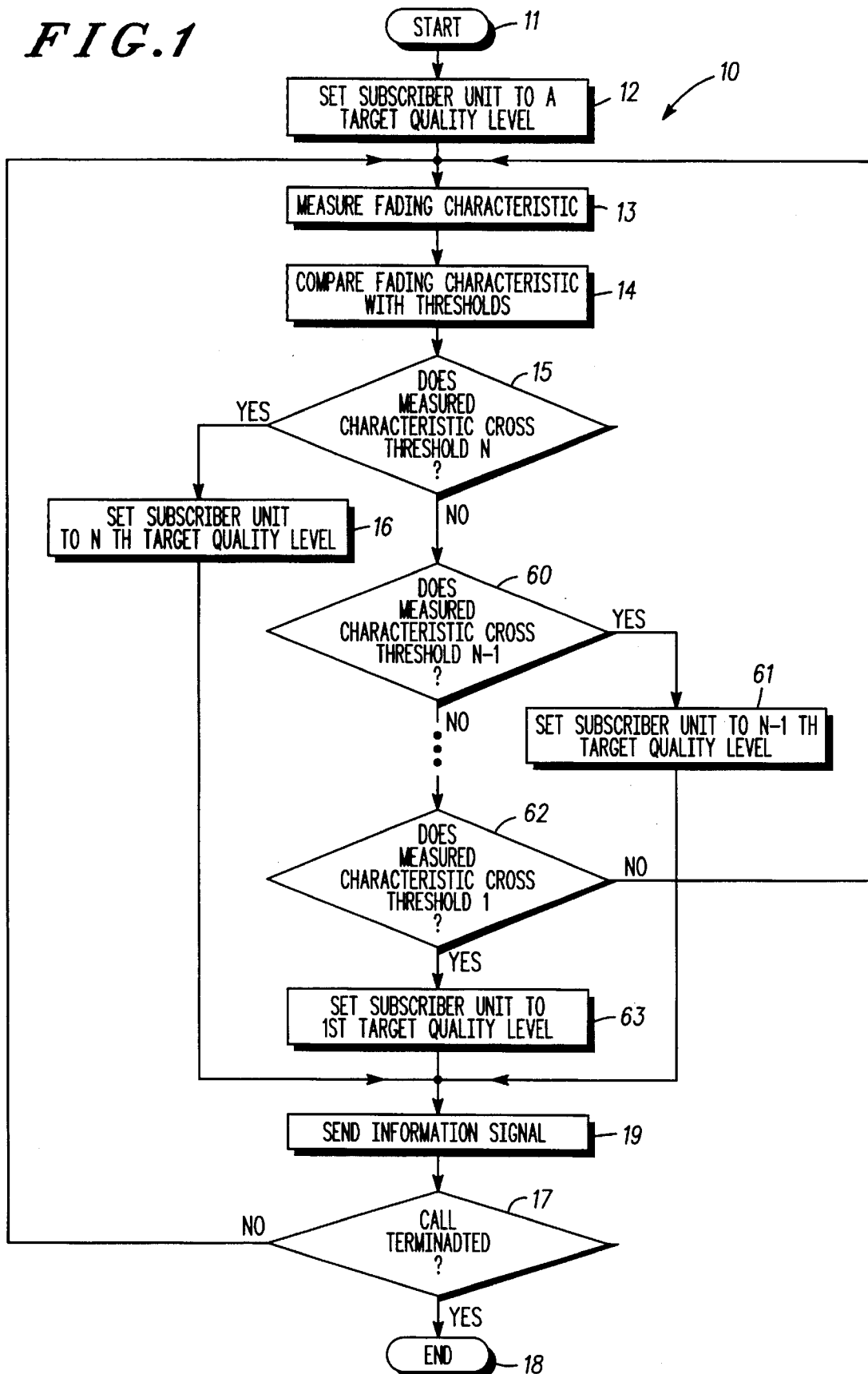
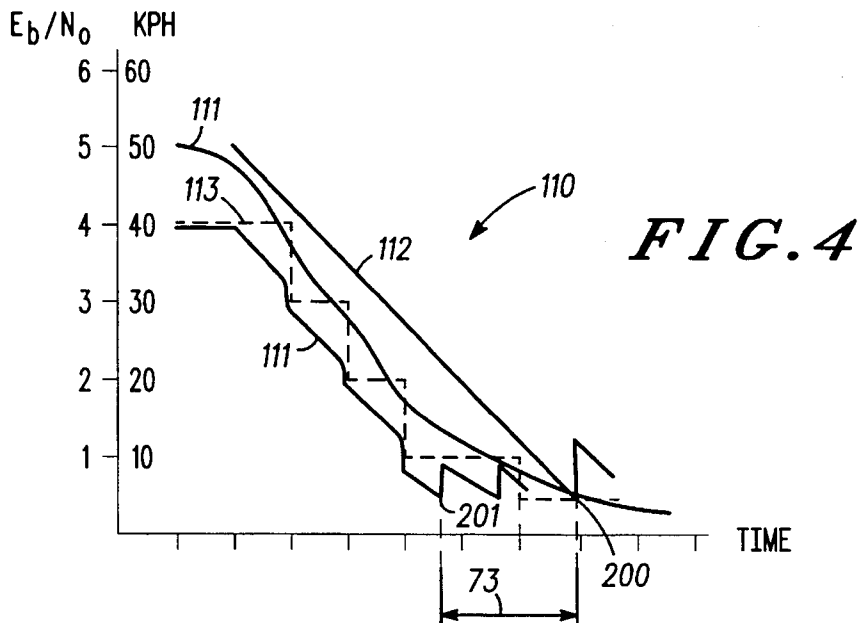
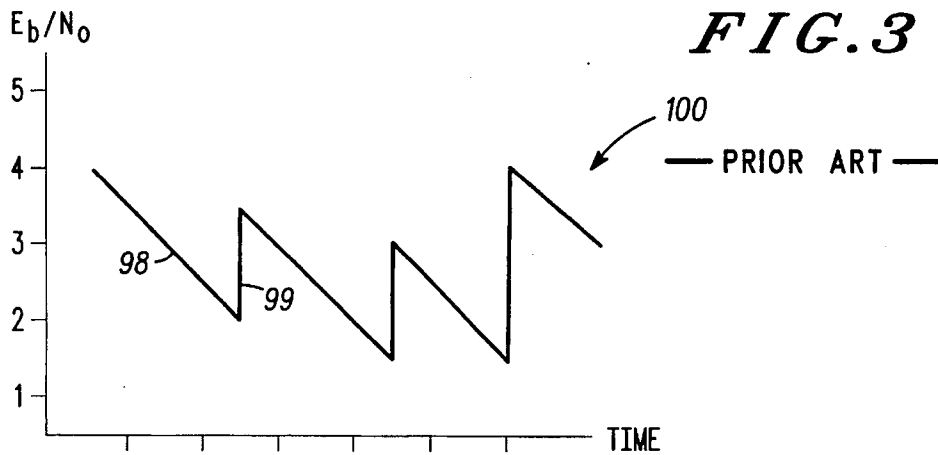
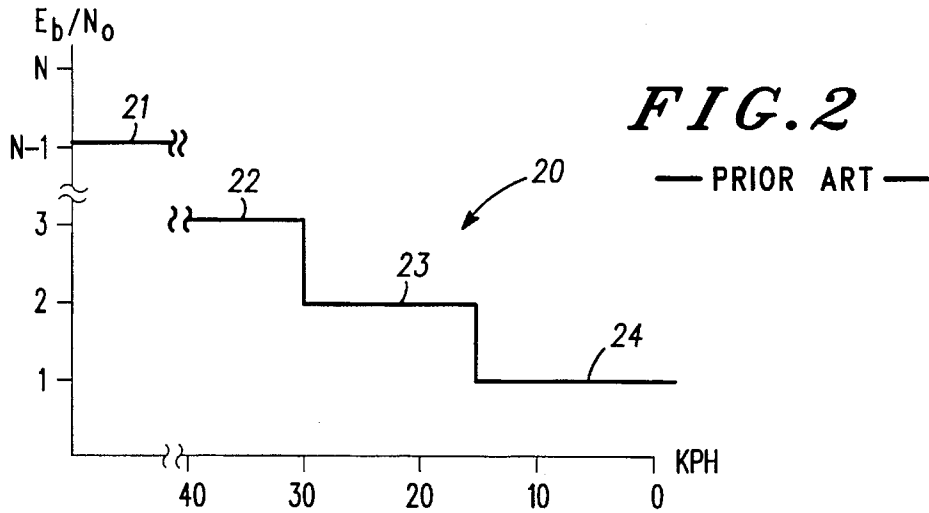


FIG. 1





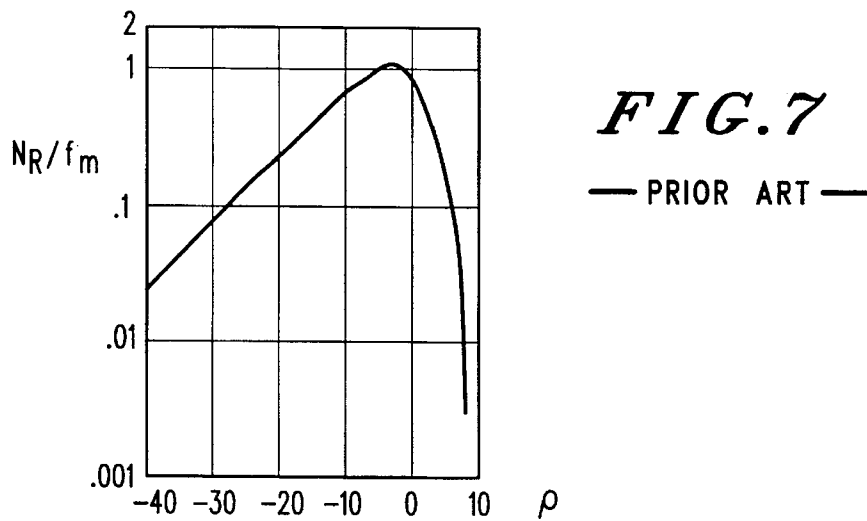
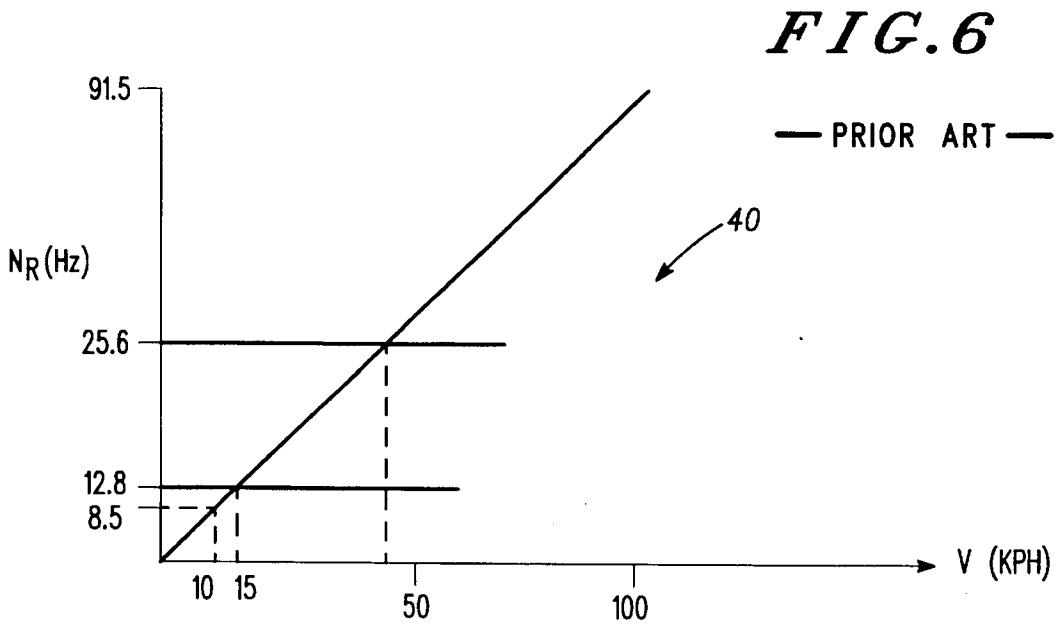
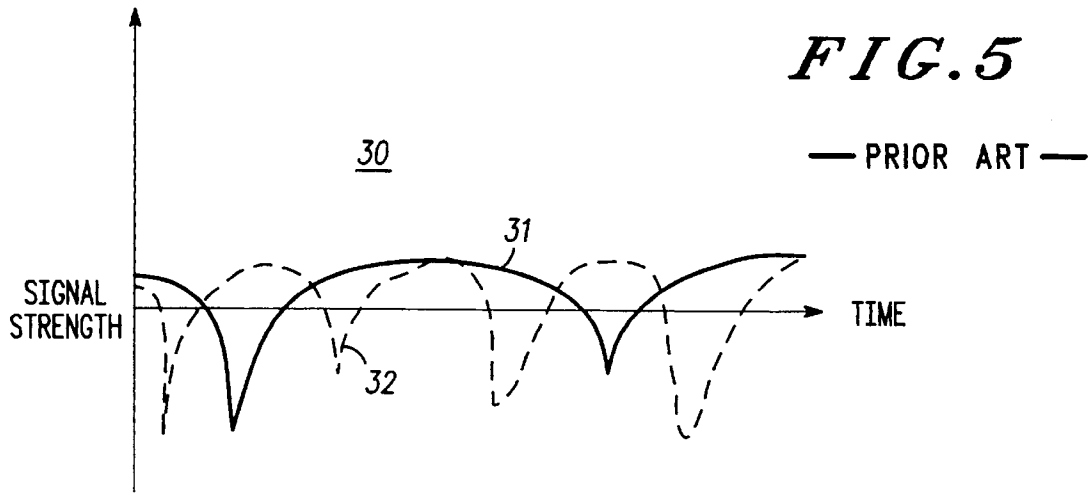


FIG. 8

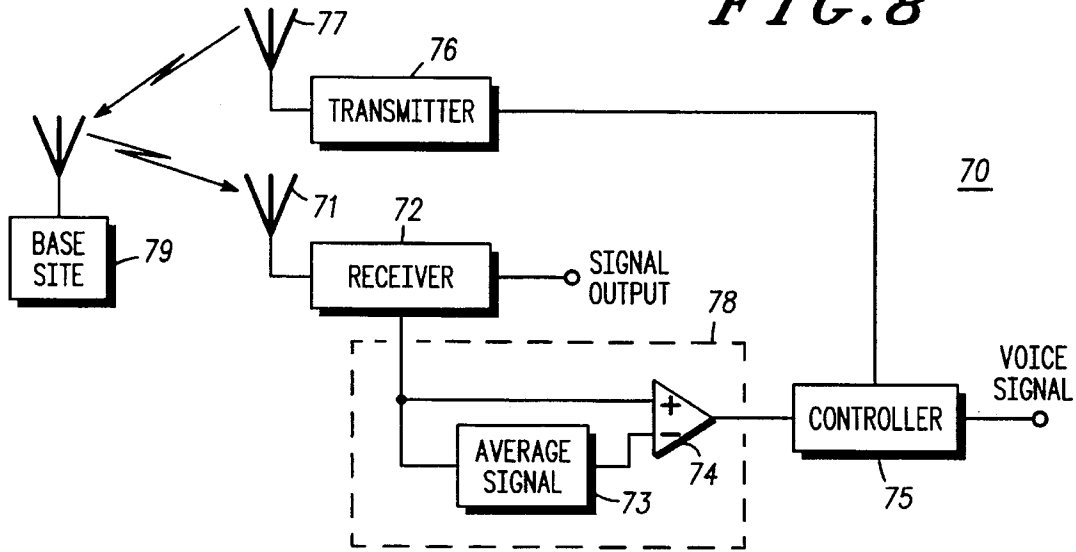
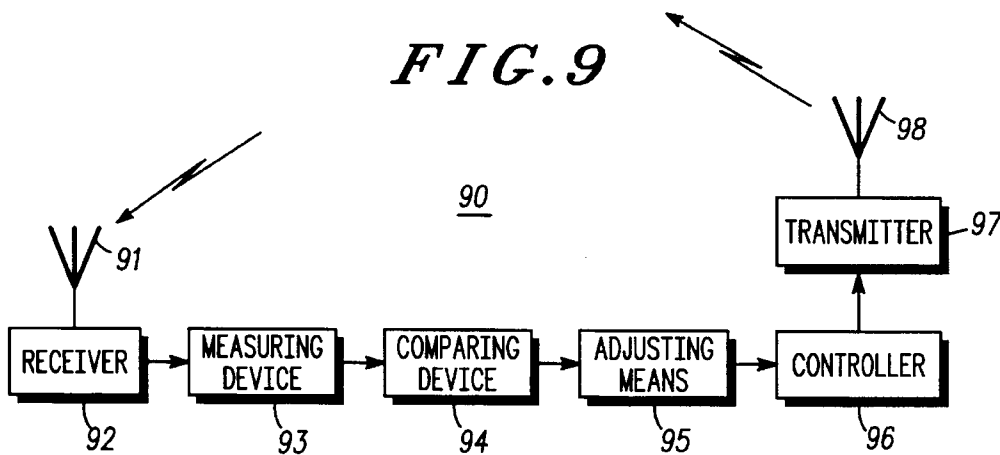


FIG. 9



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