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**Giloh**

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(54) **CELLULAR COMMUNICATION SYSTEM WITH MOVING BASE STATIONS AND METHODS AND APPARATUS USEFUL IN CONJUNCTION THEREWITH**

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**ABSTRACT**

A mobile communication network system operative in conjunction with a core network including a core device and at least one static base station includes a plurality of base stations. The system further includes a population of mobile stations communicating via antennae with the base stations. The base stations include at least one moving base station which communicates via antennae with the mobile stations and includes base station functionality and a first radio manager and mobile station functionality all co-located with the base station functionality. The base station functionality has a physical back-connection to the first radio manager. The first radio manager has a physical connection with the mobile station functionality. The mobile station functionality communicates via antennae with at least one selectable static base station. The information used to determine whether to reject includes the location of the moving base station and statistics regarding measurements of link quality.

**54 Claims, 14 Drawing Sheets**

