

# United States Patent [19]

Christian et al.

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[45] Date of Patent: **Oct. 22, 1985**

[54] TIME DIVISION MULTIPLE ACCESS COMMUNICATIONS SYSTEM

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### [57] ABSTRACT

[21] Appl. No.: 566,767

A covert line of sight time division multiple access communications system comprised of a plurality of geographically separated transceivers consisting of identical hardware and capable of operating either as a master station or a slave station, and when desirable as a repeater station. The system operates with a non-committed master station operating within a predetermined power circle of operation whereby multiple slave stations and/or repeaters communicate with each other by way of the master station in a one half duplex mode at a single frequency in the millimeter wave frequency range between 54 and 58 GHz.

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[51] Int. Cl.<sup>4</sup> ..... H04J 3/16; H04J 3/06;  
H04B 1/00; H04B 7/00

[52] U.S. Cl. .... 370/95; 370/104;  
455/56

[58] Field of Search ..... 370/104, 100, 103, 95;  
455/56, 53

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13 Claims, 10 Drawing Figures

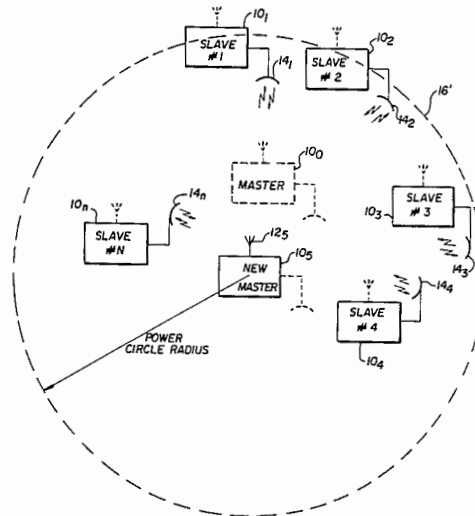


FIG. 1

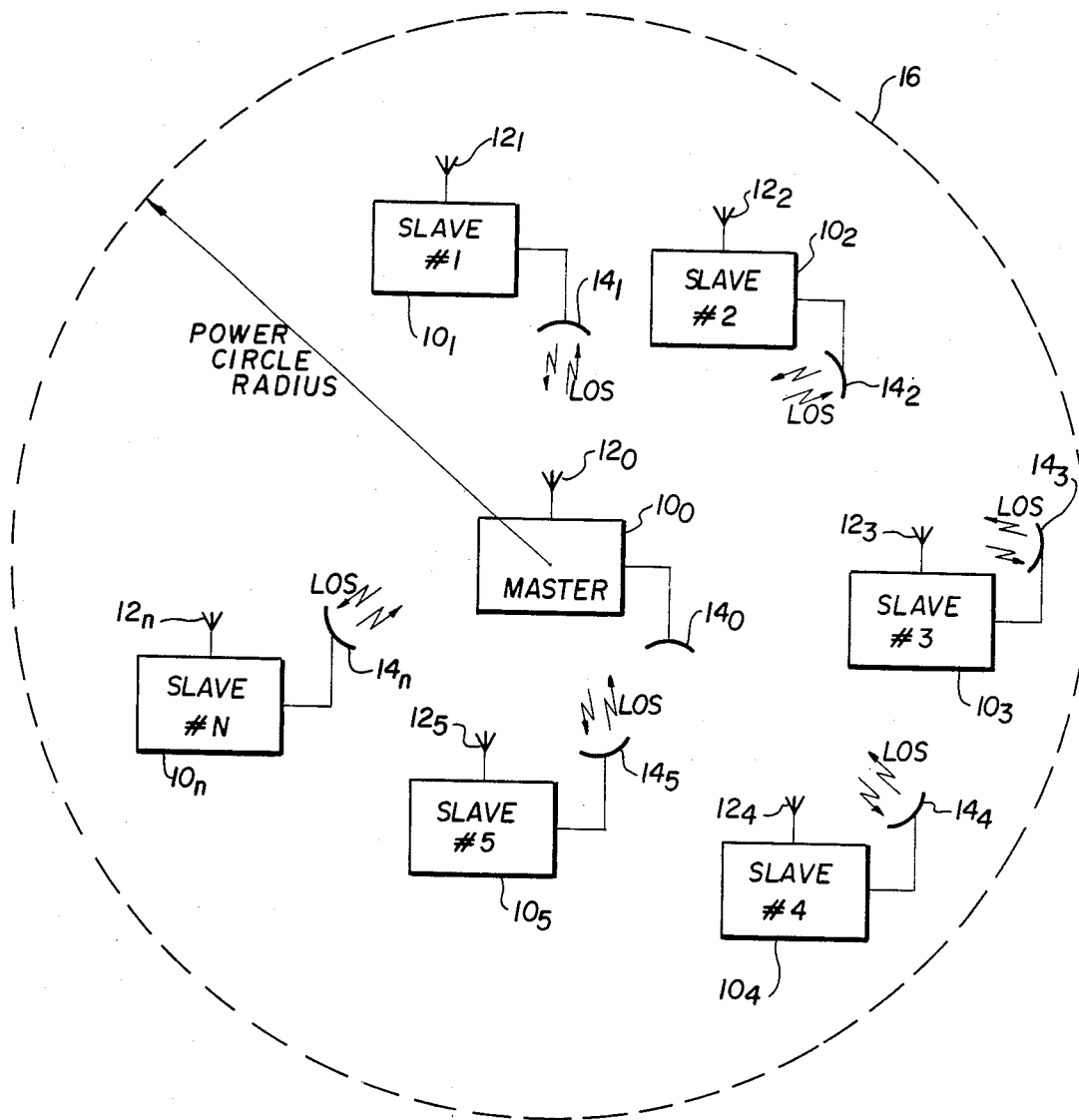
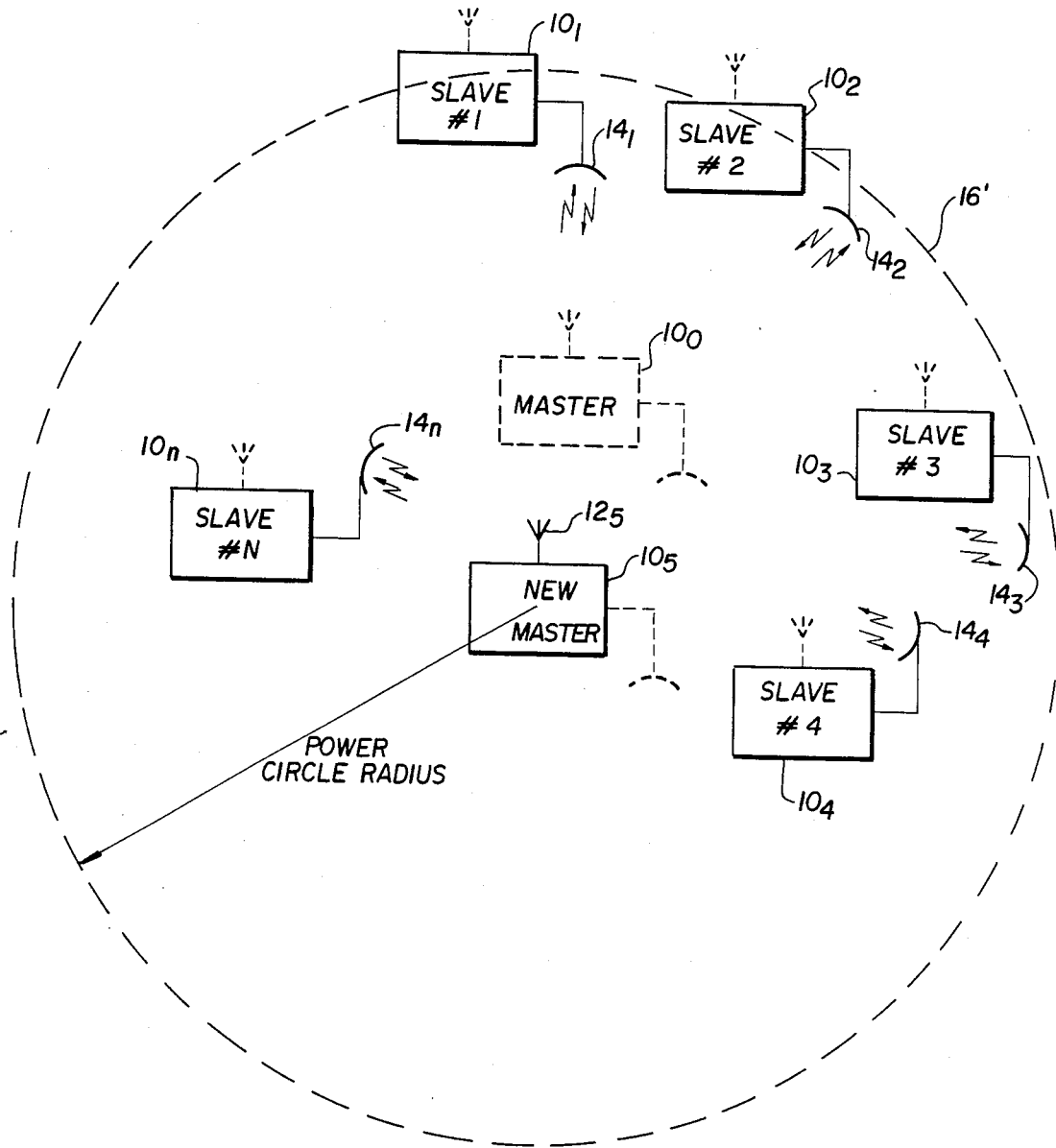
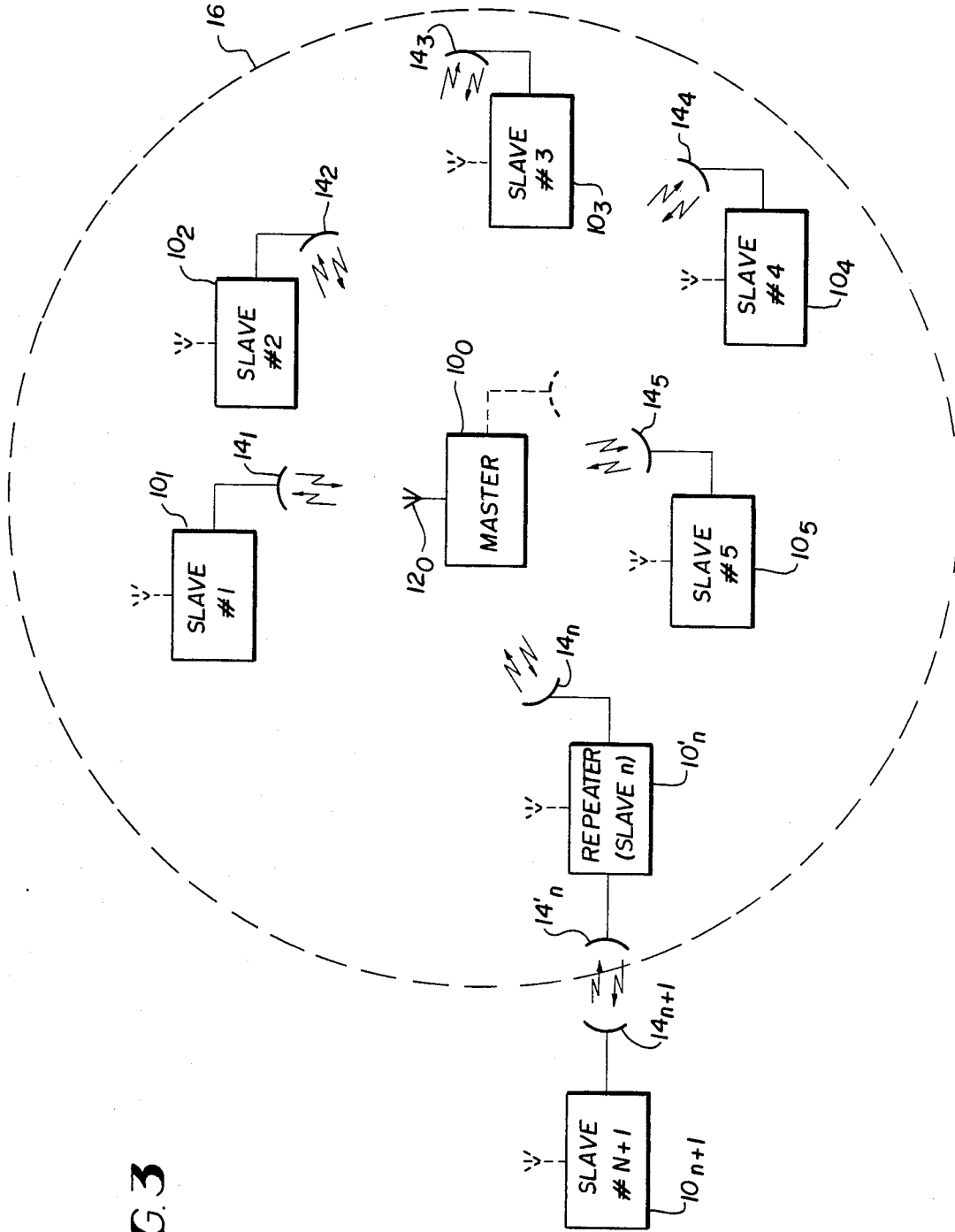
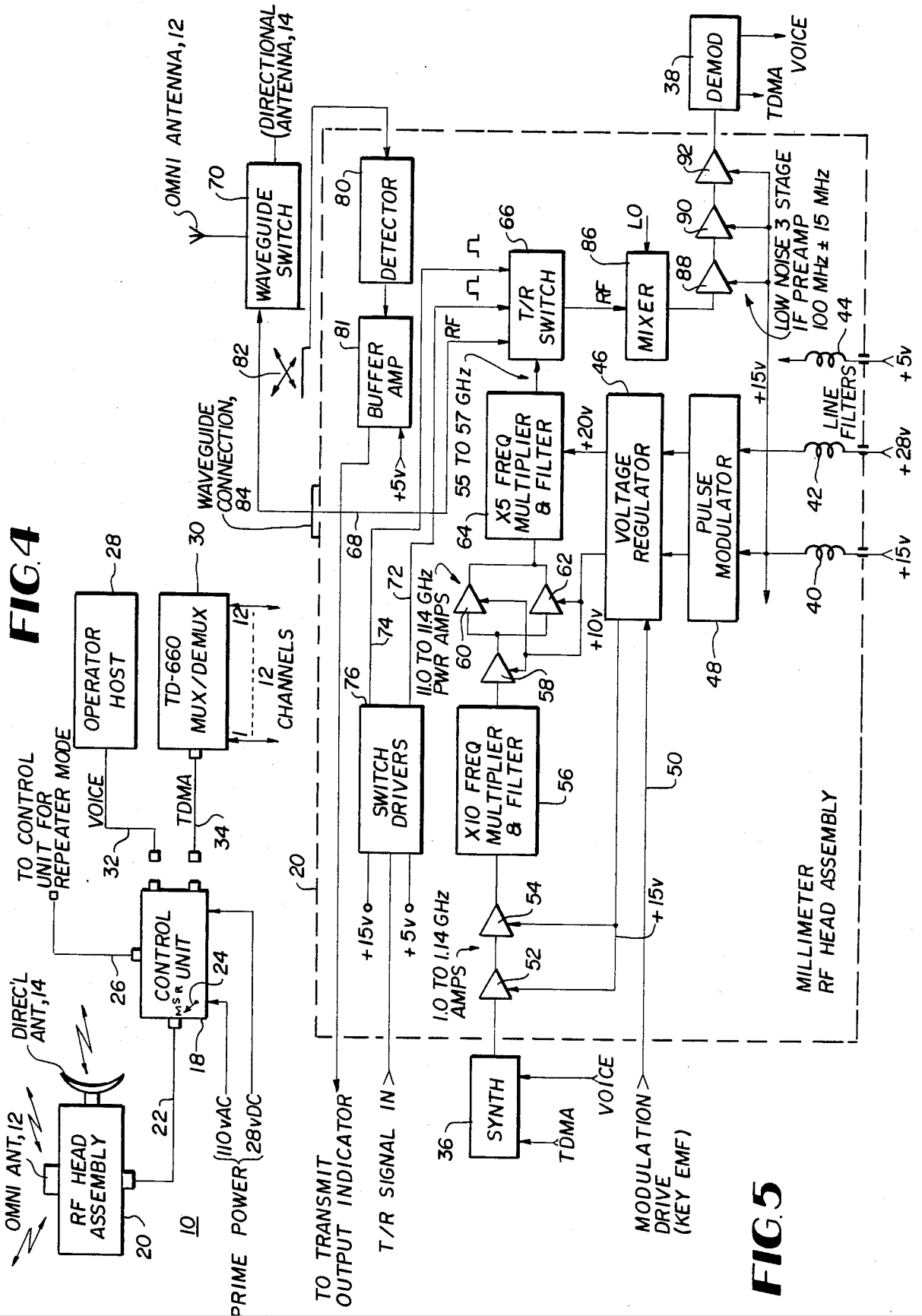


FIG. 2





**FIG. 3**



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