

[54] FREQUENCY DIVISION MULTIPLEXED ACKNOWLEDGE BACK PAGING SYSTEM

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[73] Assignee: Motorola, Inc., Schaumburg, Ill.

[21] Appl. No.: 141,654

[22] Filed: Jan. 7, 1988

[51] Int. Cl.<sup>4</sup> ..... H04Q 9/00

[52] U.S. Cl. .... 340/825.44; 340/825.47; 379/57; 370/76

[58] Field of Search ..... 340/825.44, 825.47, 340/825.48, 311.1; 370/92, 93, 94, 50, 69.1, 73, 76; 379/56, 57; 455/31, 89, 92

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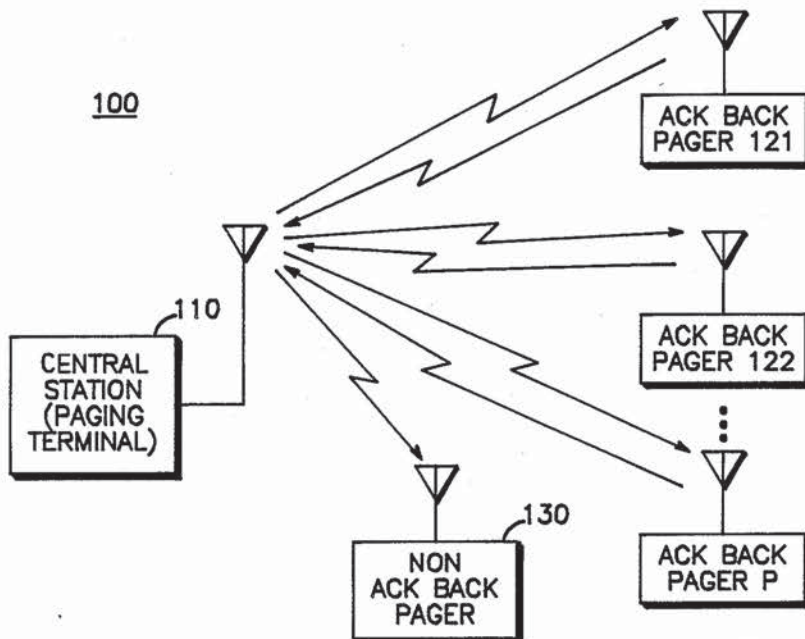
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Primary Examiner—Gerald Brigrance  
Attorney, Agent, or Firm—William E. Zitelli; Vincent B. Ingrassia

ABSTRACT

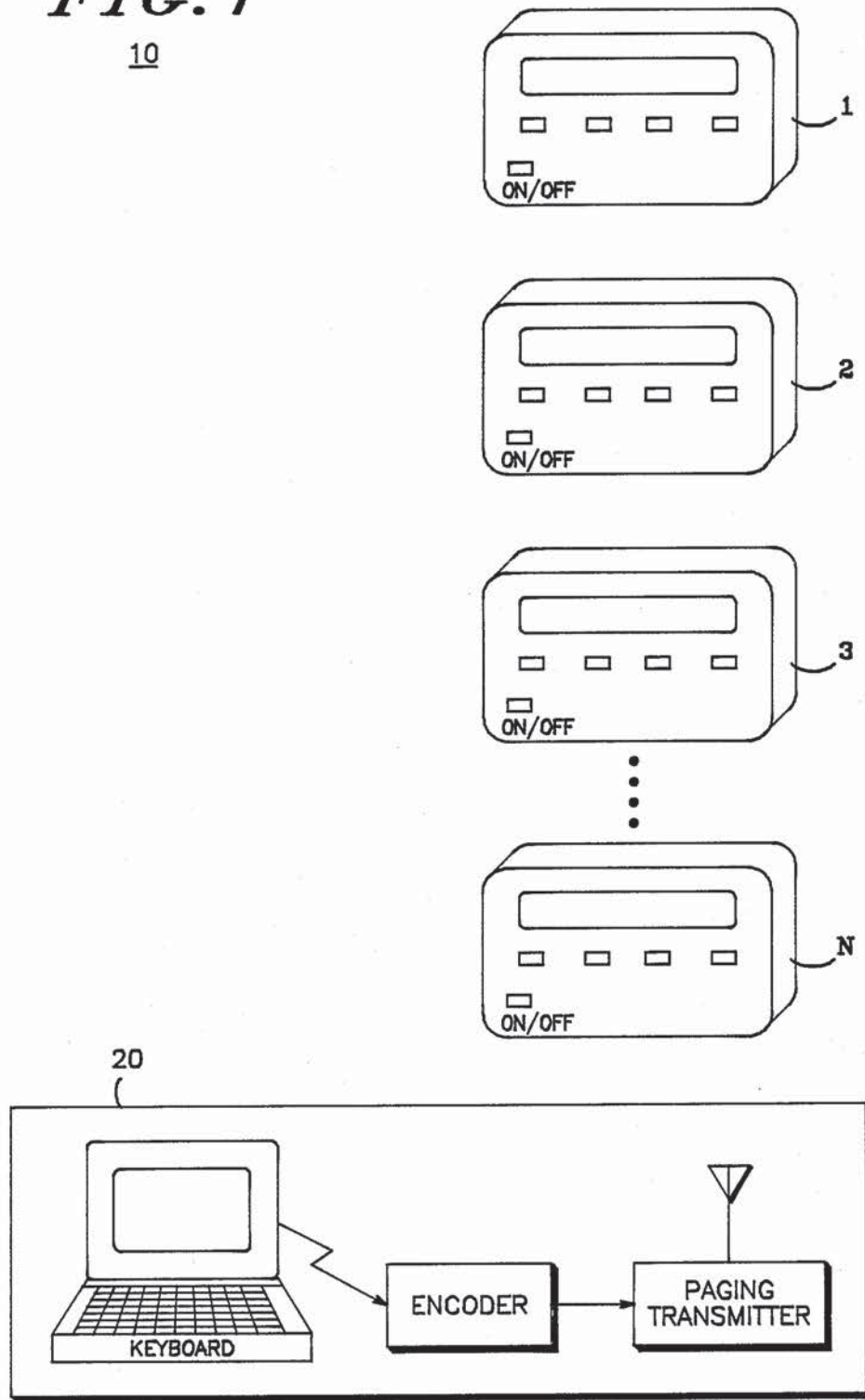
[57] An acknowledge back (ack-back) paging system is provided which includes a central station which transmits a group of message signals to a group of ack-back pagers which are addressed as a group. The users of the group of addressed ack-back pagers indicate a response to their respective pagers thus providing ack-back data. The pagers in the group of addressed ack-back pagers then simultaneously transmit back to the central station their ack-back data on different frequency sub-bands, a different frequency sub-band being allocated to each of the pagers in the group.

21 Claims, 9 Drawing Sheets

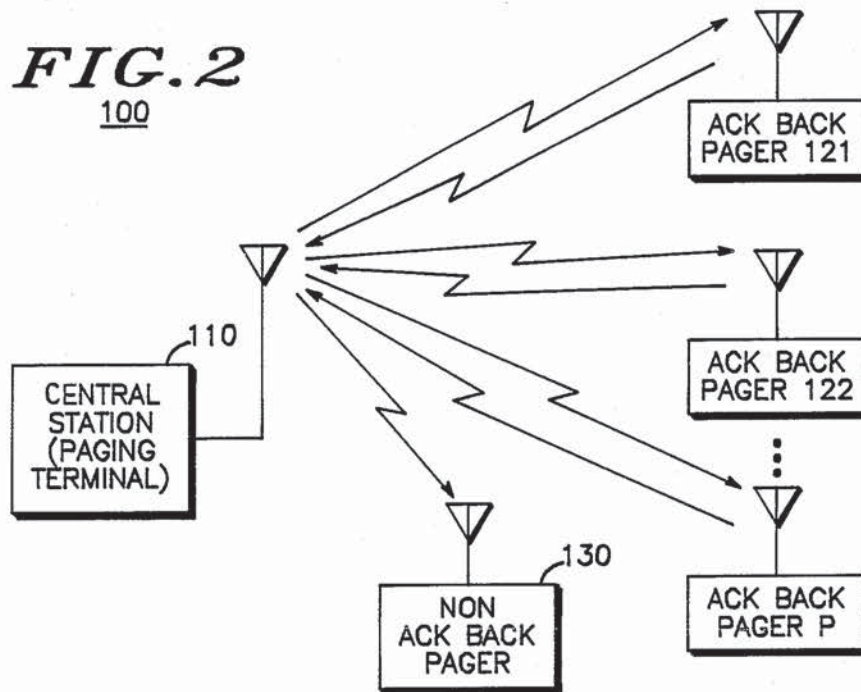


**FIG. 1**

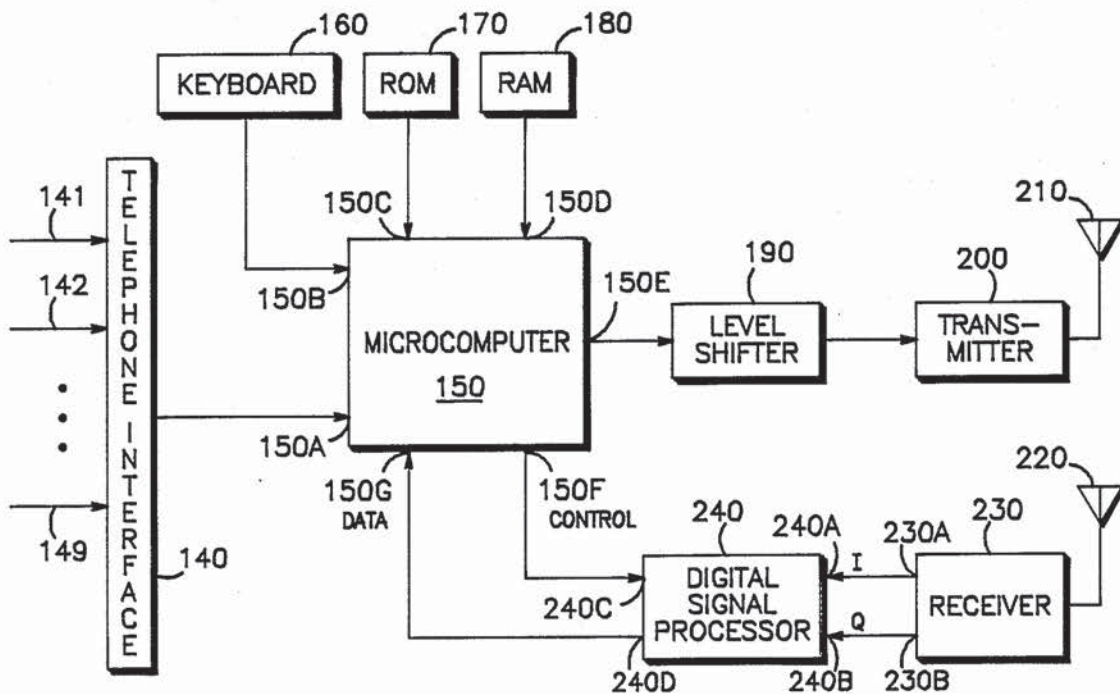
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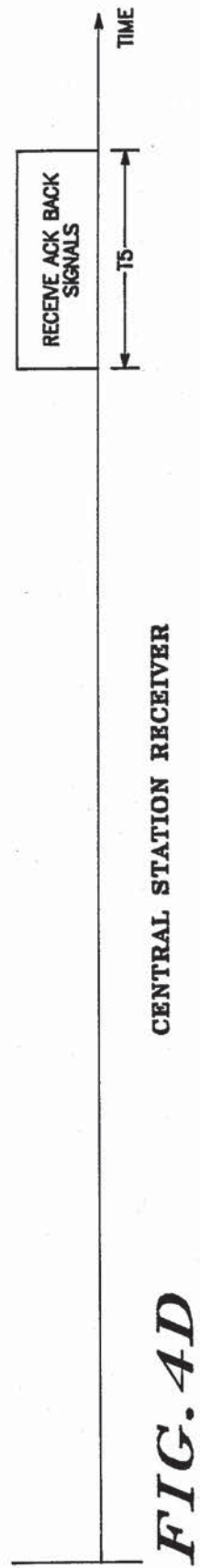
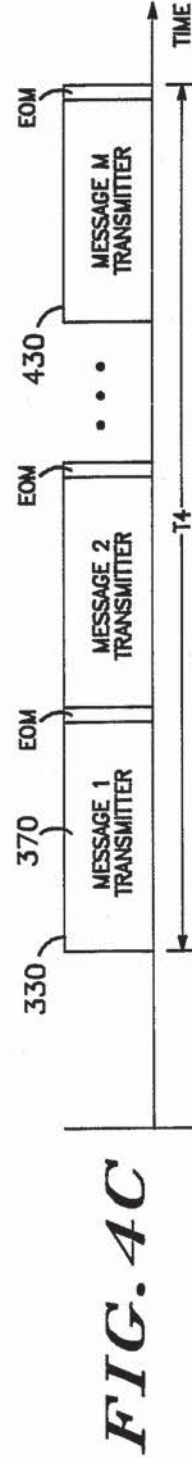
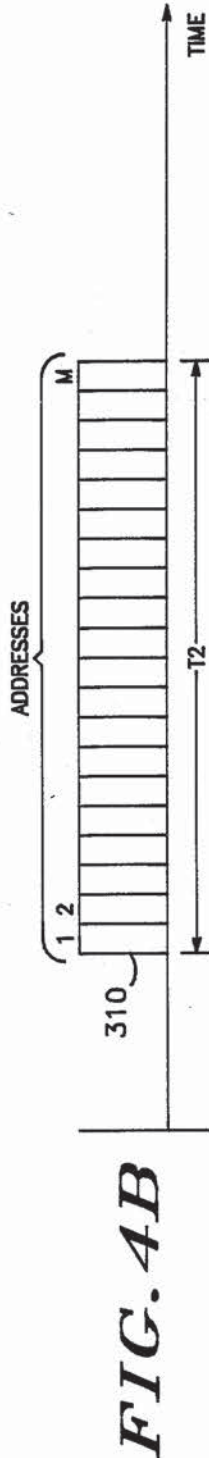
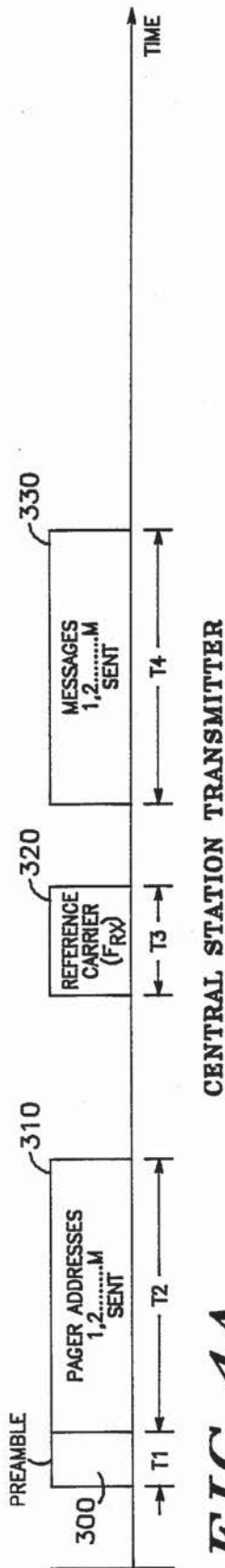


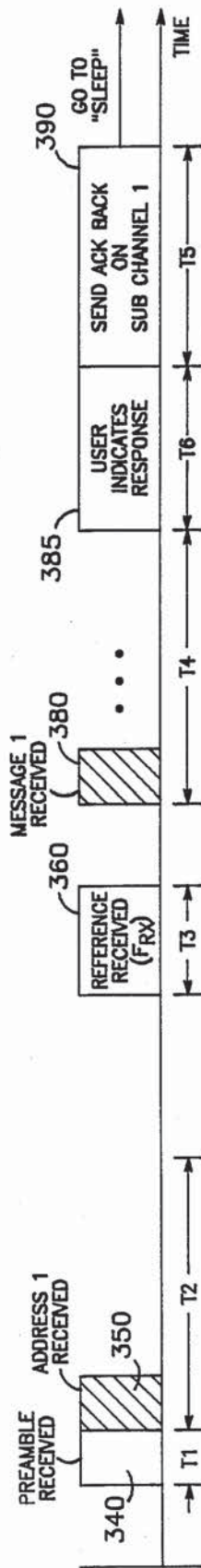
**FIG. 2**  
100



**FIG. 3**  
110

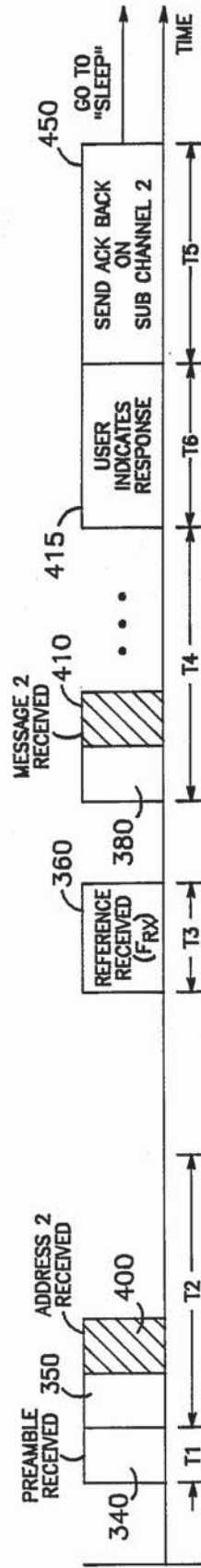






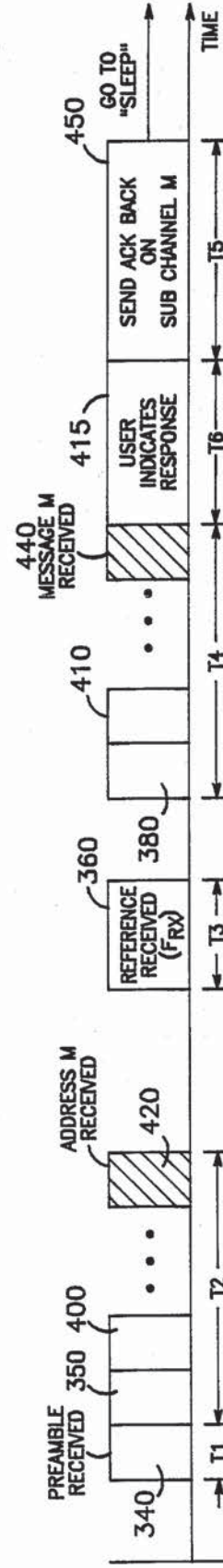
AB-1

FIG. 4E



AB-2

FIG. 4F



AB-M

FIG. 4G

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