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(54) AUTOMATED METER READING SYSTEM, COMMUNICATION AND CONTROL NETWORK FOR AUTOMATED METER READING, METER DATA COLLECTOR PROGRAM PRODUCT, AND ASSOCIATED METHODS

Publication Classification

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(57) ABSTRACT

An automated meter reading network system to collect utility usage data from multiple utility meters having utility meter sensors is provided. The system includes multiple meter data collectors each in communication with one or more utility meters to collect utility usage data and forming a wireless mesh communications network characterized by having a varying frequency mode of operation. The system also includes a host computer in communication with the meter data collectors either directly or through multiple field host data collectors, which can be connected to the host computer through a wide area network. The system also includes a meter data collector program product at least partially stored in the memory of the host computer adapted to manage the mesh communication network that is adapted to vary the frequency mode of at least portions of the mesh communication network between a fixed frequency mode and a frequency hopping spread spectrum mode to enhance network performance.

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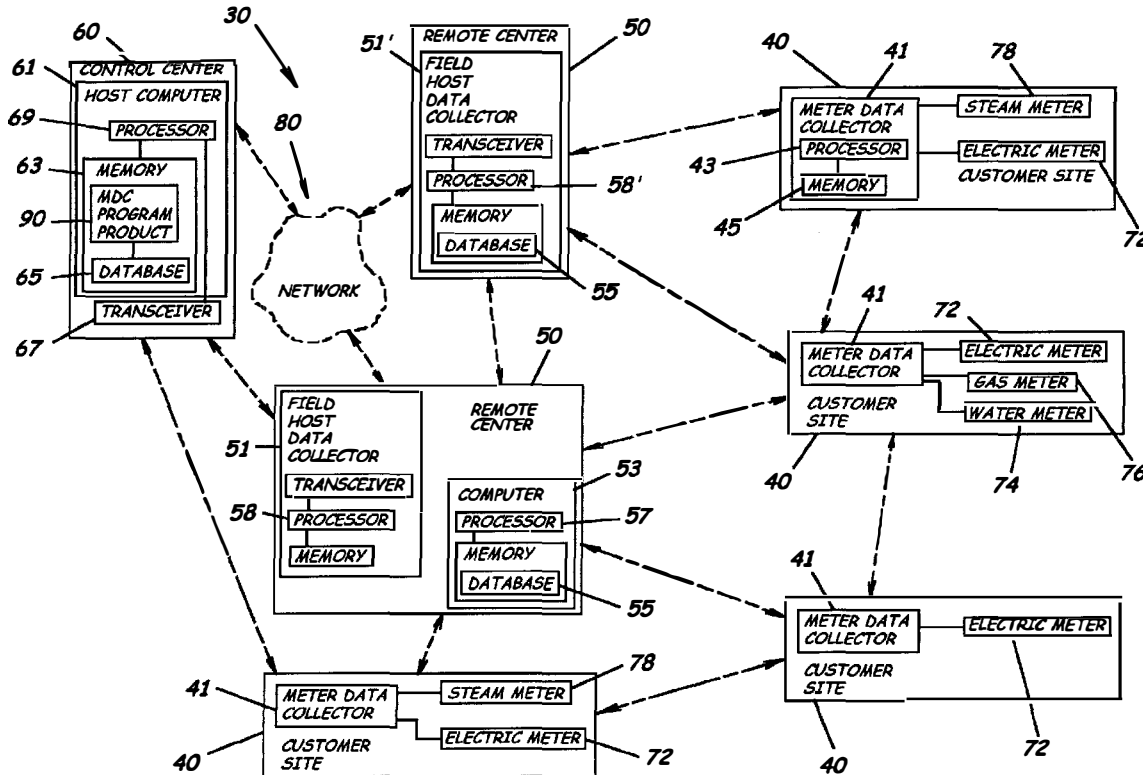
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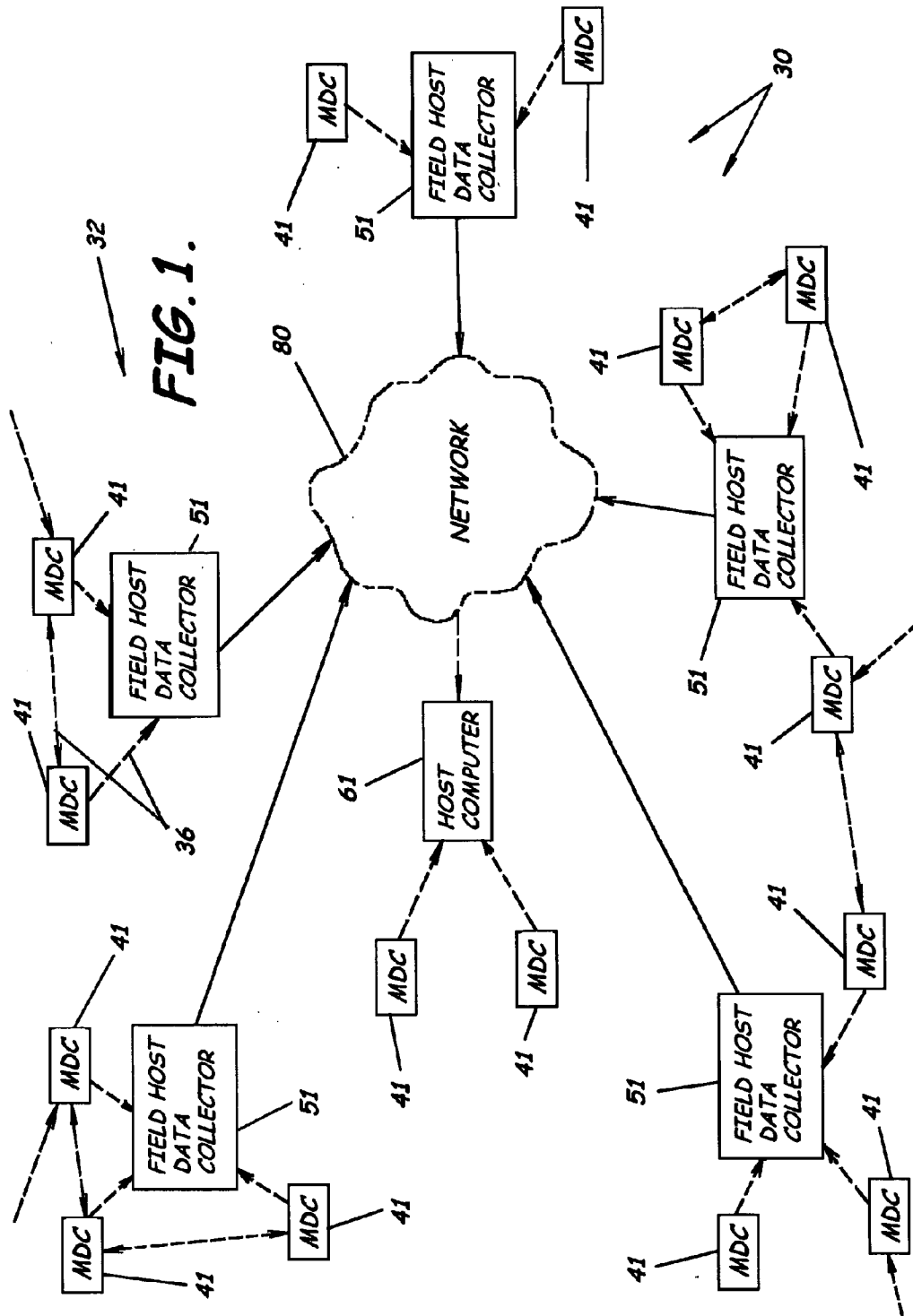
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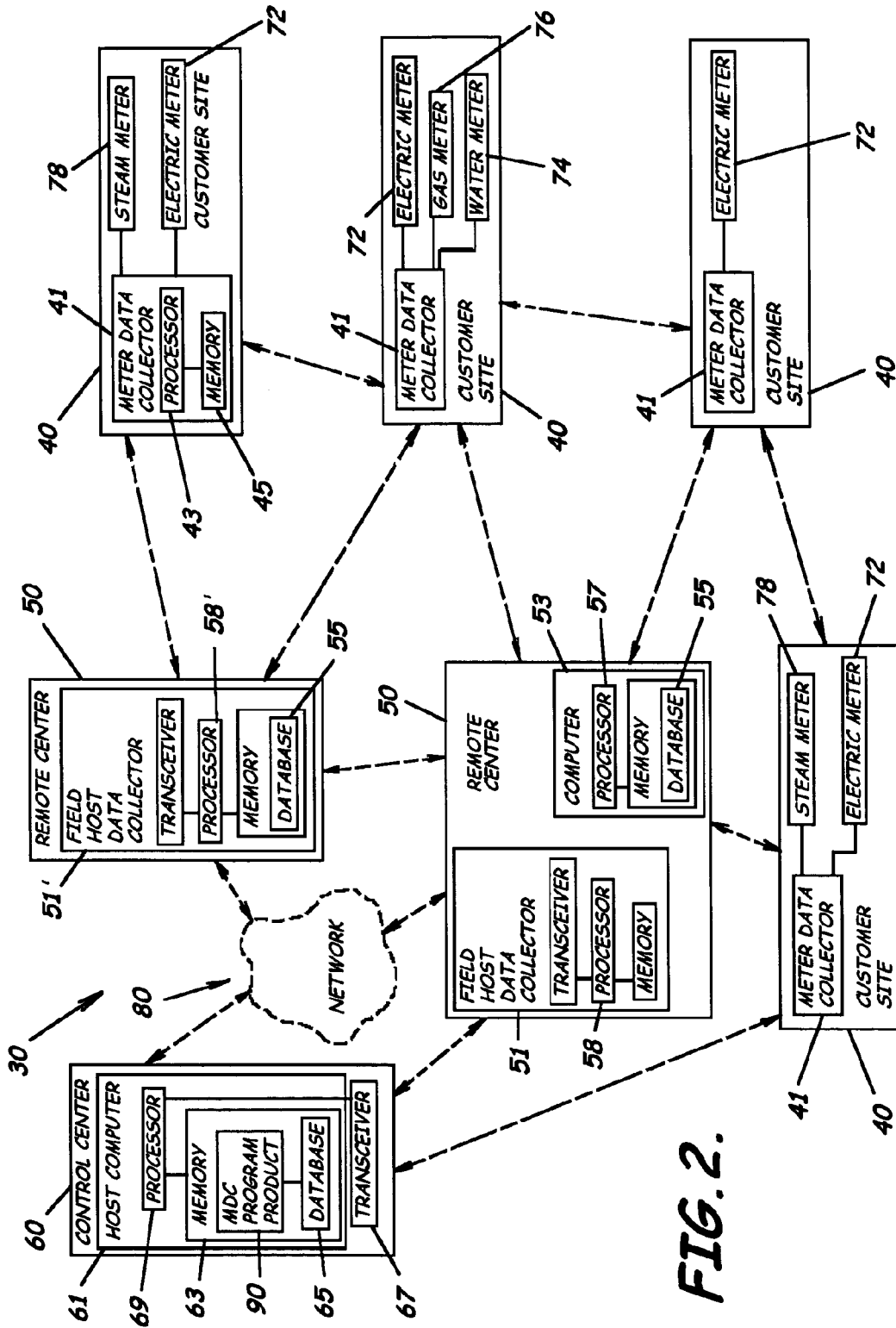
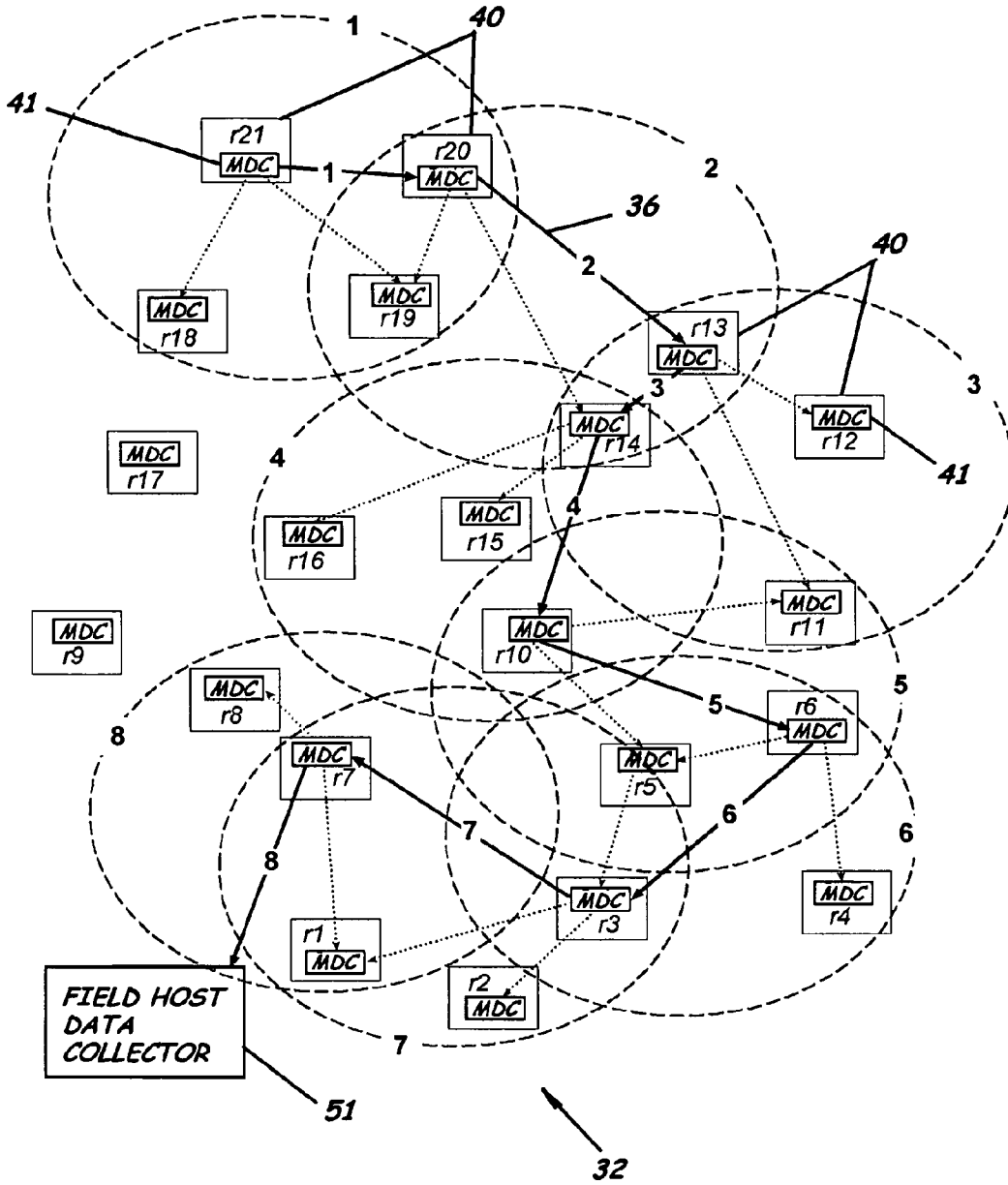
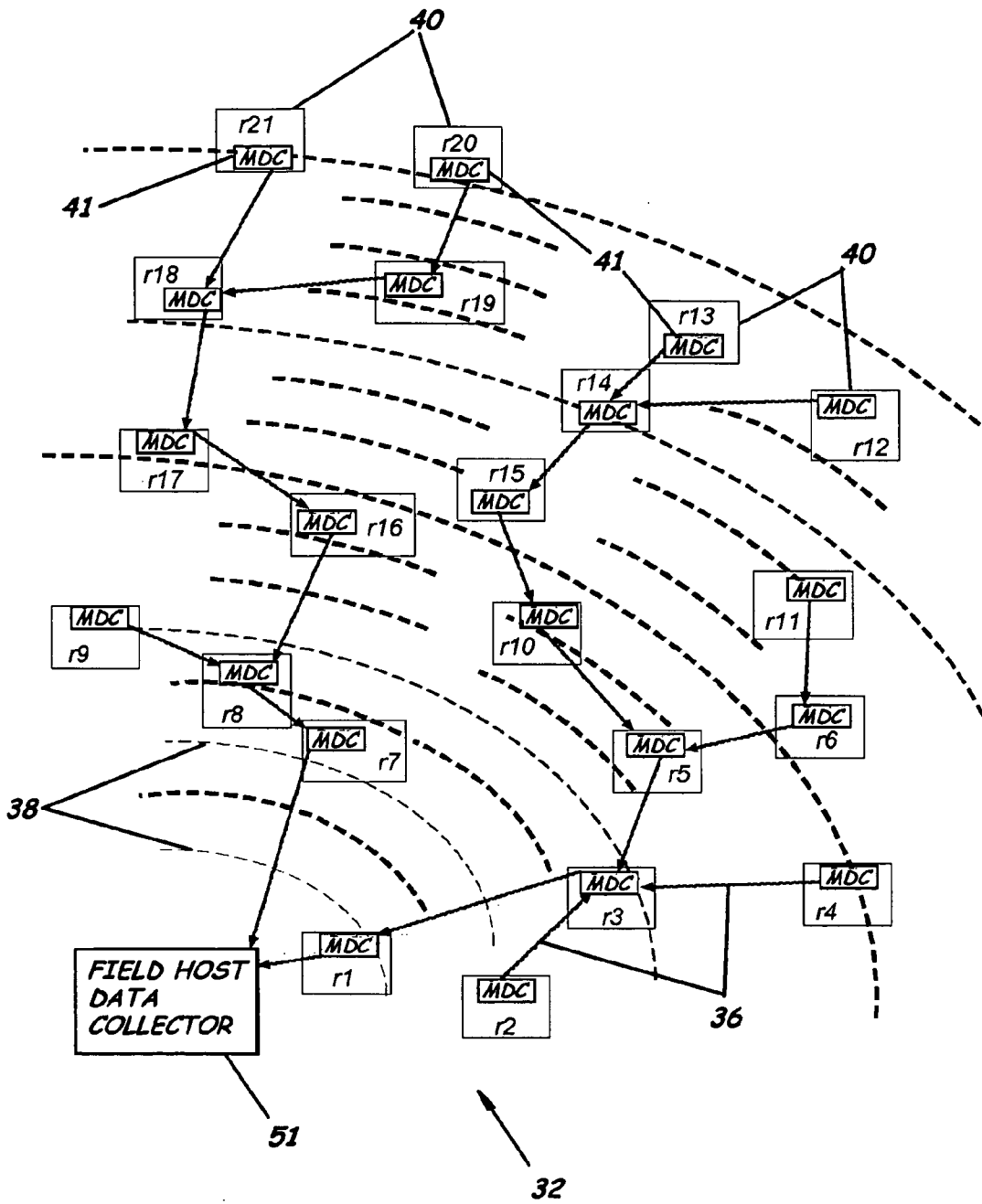


FIG. 2.

**FIG. 3.**





**FIG. 4.**

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