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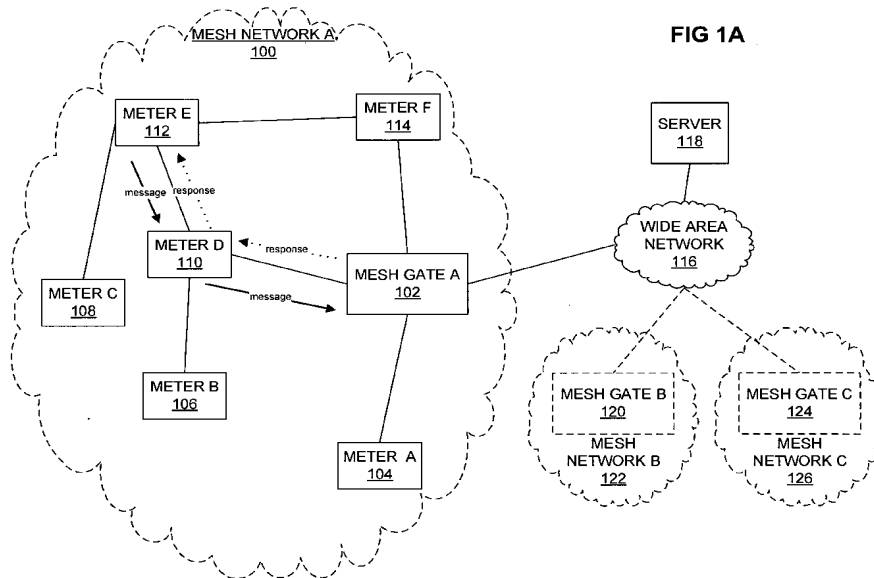
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(54) Title: COMMUNICATION AND MESSAGE ROUTE OPTIMIZATION AND MESSAGING IN A MESH NETWORK



(57) Abstract: A method and system facilitate communications between an unassociated device and a server via a mesh network and a wide area network. The method may include receiving transmissions from candidate proxy devices, wherein each candidate proxy device is associated with a mesh network. The method may include selecting a proxy device from the candidate proxy devices. The method may include communicating with a server via the proxy device and the associated mesh network.

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**COMMUNICATION AND MESSAGE ROUTE OPTIMIZATION  
AND MESSAGING IN A MESH NETWORK**

CROSS REFERENCE TO RELATED APPLICATIONS

**[0001]** This application claims the benefit of priority to the following United States provisional patent applications which are incorporated herein by reference in their entirety:

- serial number 60/989,957 entitled "Point-to-Point Communication within a Mesh Network", filed November 25, 2007 (TR0004-PRO);
- serial number 60/989,967 entitled "Efficient And Compact Transport Layer And Model For An Advanced Metering Infrastructure (AMI) Network," filed November 25, 2007 (TR0003-PRO);
- serial number 60/989,958 entitled "Creating And Managing A Mesh Network Including Network Association," filed November 25, 2007 (TR0005-PRO);
- serial number 60/989,964 entitled "Route Optimization Within A Mesh Network," filed November 25, 2007 (TR0007-PRO);
- serial number 60/989,950 entitled "Application Layer Device Agnostic Collector Utilizing ANSI C12.22," filed November 25, 2007 (TR0009-PRO);
- serial number 60/989,953 entitled "System And Method For Real Time Event Report Generation Between Nodes And Head End Server In A Meter Reading Network Including From Smart And Dumb Meters," filed November 25, 2007 (TR0010-PRO);
- serial number 60/989,975 entitled "System and Method for Network (Mesh) Layer And Application Layer Architecture And Processes," filed November 25, 2007 (TR0014-PRO);
- serial number 60/989,959 entitled "Tree Routing Within a Mesh Network," filed November 25, 2007 (TR0017-PRO);
- serial number 60/989,961 entitled "Source Routing Within a Mesh Network," filed November 25, 2007 (TR0019-PRO);
- serial number 60/989,962 entitled "Creating and Managing a Mesh Network," filed November 25, 2007 (TR0020-PRO);

- serial number 60/989,951 entitled “Network Node And Collector Architecture For Communicating Data And Method Of Communications,” filed November 25, 2007 (TR0021-PRO);
- serial number 60/989,955 entitled “System And Method For Recovering From Head End Data Loss And Data Collector Failure In An Automated Meter Reading Infrastructure,” filed November 25, 2007 (TR0022-PRO);
- serial number 60/989,952 entitled “System And Method For Assigning Checkpoints To A Plurality Of Network Nodes In Communication With A Device Agnostic Data Collector,” filed November 25, 2007 (TR0023-PRO);
- serial number 60/989,954 entitled “System And Method For Synchronizing Data In An Automated Meter Reading Infrastructure,” filed November 25, 2007 (TR0024-PRO);
- serial number 60/992,312 entitled “Mesh Network Broadcast,” filed December 4, 2007 (TR0027-PRO);
- serial number 60/992,313 entitled "Multi Tree Mesh Networks", filed December 4, 2007 (TR0028-PRO);
- serial number 60/992,315 entitled “Mesh Routing Within a Mesh Network,” filed December 4, 2007 (TR0029-PRO);
- serial number 61/025,279 entitled "Point-to-Point Communication within a Mesh Network", filed January 31, 2008 (TR0030-PRO), and which are incorporated by reference.
- serial number 61/025,270 entitled “Application Layer Device Agnostic Collector Utilizing Standardized Utility Metering Protocol Such As ANSI C12.22,” filed January 31, 2008 (TR0031-PRO);
- serial number 61/025,276 entitled “System And Method For Real-Time Event Report Generation Between Nodes And Head End Server In A Meter Reading Network Including Form Smart And Dumb Meters,” filed January 31, 2008 (TR0032-PRO);
- serial number 61/025,282 entitled “Method And System for Creating And Managing Association And Balancing Of A Mesh Device In A Mesh Network,” filed January 31, 2008 (TR0035-PRO);

- serial number 61/025,271 entitled "Method And System for Creating And Managing Association And Balancing Of A Mesh Device In A Mesh Network," filed January 31, 2008 (TR0037-PRO);
- serial number 61/025,287 entitled "System And Method For Operating Mesh Devices In Multi-Tree Overlapping Mesh Networks", filed January 31, 2008 (TR0038-PRO);
- serial number 61/025,278 entitled "System And Method For Recovering From Head End Data Loss And Data Collector Failure In An Automated Meter Reading Infrastructure," filed January 31, 2008 (TR0039-PRO);
- serial number 61/025,273 entitled "System And Method For Assigning Checkpoints to A Plurality Of Network Nodes In Communication With A Device-Agnostic Data Collector," filed January 31, 2008 (TR0040-PRO);
- serial number 61/025,277 entitled "System And Method For Synchronizing Data In An Automated Meter Reading Infrastructure," filed January 31, 2008 (TR0041-PRO); and
- serial number 61/094,116 entitled "Message Formats and Processes for Communication Across a Mesh Network," filed September 4, 2008 (TR0049-PRO).

[0002] This application hereby references and incorporates by reference each of the following United States patent applications filed contemporaneously herewith:

- serial number \_\_\_\_\_ entitled "Point-to-Point Communication within a Mesh Network", filed November 21, 2008 (TR0004-US);
- serial number \_\_\_\_\_ entitled "Efficient And Compact Transport Layer And Model For An Advanced Metering Infrastructure (AMI) Network," filed November 21, 2008 (TR0003-US);
- serial number \_\_\_\_\_ entitled "COLLECTOR DEVICE AND SYSTEM UTILIZING STANDARDIZED UTILITY METERING PROTOCOL," filed November 21, 2008 (TR0009-US);
- serial number \_\_\_\_\_ entitled "METHOD AND SYSTEM FOR CREATING AND MANAGING ASSOCIATION AND BALANCING OF A MESH DEVICE IN A MESH NETWORK," filed November 21, 2008 (TR0020-US); and
- serial number \_\_\_\_\_ entitled "System And Method For Operating Mesh Devices In Multi-Tree Overlapping Mesh Networks", filed November 21, 2008 (TR0038-US).

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