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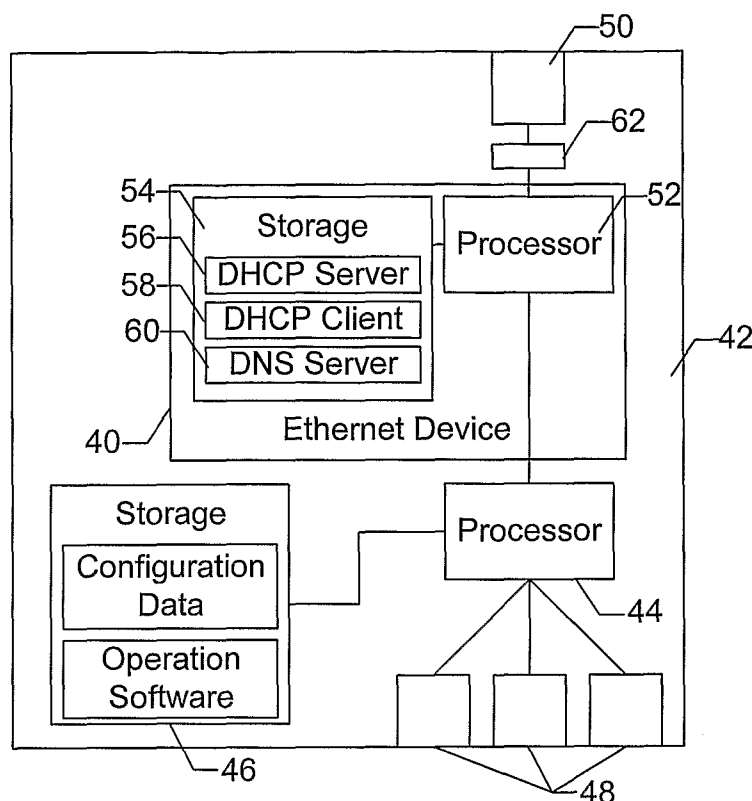
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(54) Title: DEVICE HAVING AN EMBEDDED ETHERNET NETWORKING AUTOMATED LINK FOR FACILITATING CONFIGURATION OF THE DEVICE AND CONNECTION OF THE DEVICE TO A NETWORK



(57) Abstract: The systems and methods of the present invention provide Ethernet devices having various embodiments for embedding in a network device. The Ethernet device is used to configure and operate the network device in a networked environment. The Ethernet device, depending on the embodiment includes at least one of the following items: 1) DHCP server, 2) DHCP client, 3) DNS server, and 4) detection of upstream or downstream connection. The DHCP and DNS servers are used to connect the network device to an external device for use in configuring the network device. Further, the DHCP server and DHCP client may be used to assign an IP address to the network device, when the device is connected in a network.

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