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(54) BORDER GATEWAY RESERVATION PROTOCOL FOR TREE-BASED AGGREGATION OF INTER-DOMAIN RESERVATIONS

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(57) ABSTRACT

A reservation is created within a network by sending a stateless probe from a source node toward a destination node. The stateless probe determines a reservation path between the source node and the destination node via intermediate routers in the network. A determination is made if the destination node agrees to create the reservation path to the source node. If the destination node agrees to create the reservation path to the source node, the reservation path is established by returning a corresponding response message to the source node. Links included in more than one established reservation path to the same destination node are identified. The multiple reservations on such links are aggregated. This aggregation creates a tree of reservations rooted at the destination node.

22 Claims, 4 Drawing Sheets

