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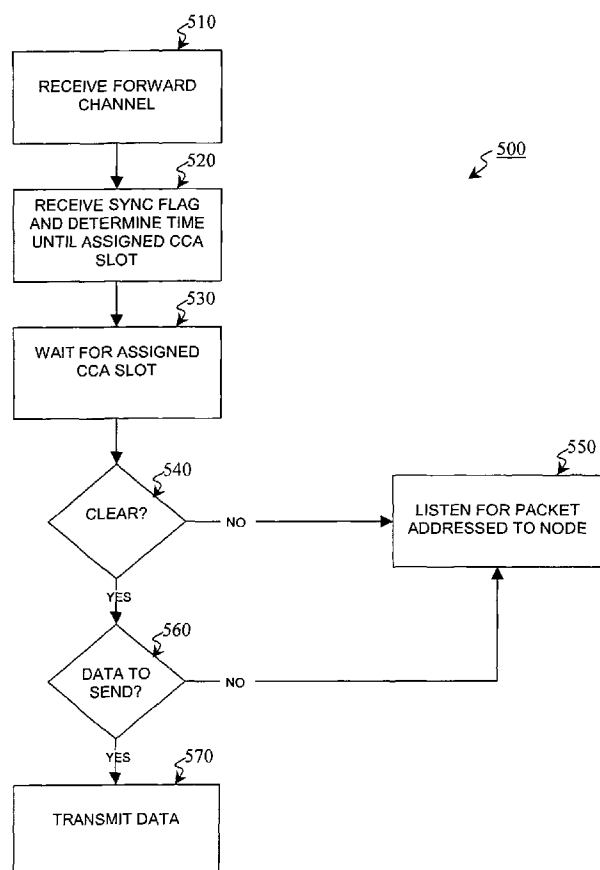
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(54) Title: SYSTEM AND METHOD FOR MULTIPPOINT TO MULTIPPOINT DATA COMMUNICATION



(57) Abstract: A system and method is providing for multipoint to multipoint data communication wherein the system comprises a communications medium interconnecting at least one central server and a plurality of communication nodes. The central server (120, fig.1) transmits information to the nodes (130) via a Forward Channel and the nodes transmit information via a Reverse Channel. Before transmitting, each of the nodes listens (monitors) during an assigned slot of a Clear Channel Assessment interval (CCA slot) of the communications cycle to ascertain whether any other node is transmitting (540). A given node transmits data only when that node determines that the network is clear (560). The nodes listen in sequential order, eliminating the probability of collisions caused by simultaneous transmissions from nodes. A query channel interval is provided for nodes not assigned a slot within clear channel assessment interval to request a slot. Assigned slots not used by nodes are allocated to other nodes. The data traffic is accordingly aggregated, thus providing efficient utilization.



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