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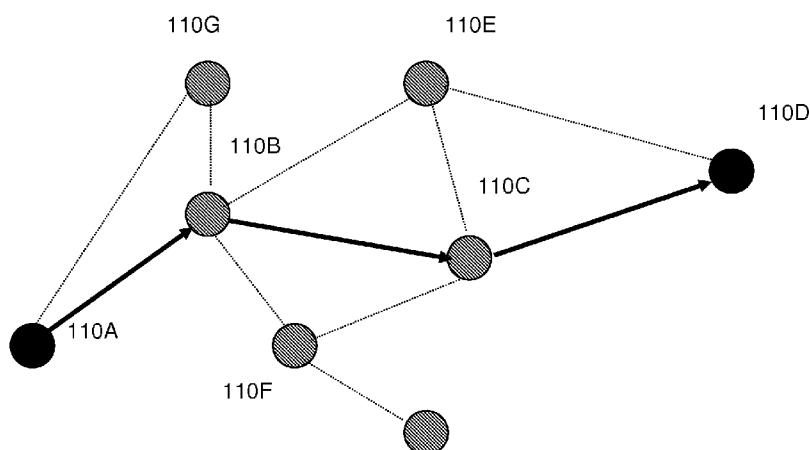
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(54) Title: METHOD OF DISCOVERING AN AD-HOC ON-DEMAND DISTANCE VECTOR ROUTE HAVING AT LEAST A MINIMUM SET OF AVAILABLE RESOURCES IN A DISTRIBUTED WIRELESS COMMUNICATIONS NETWORK



(57) Abstract: In a wireless communication network (300) comprising a plurality of devices (100), a method of discovering a route for transmitting data from a source device (110A) to a destination device (110D) via multi-hop relay, includes broadcasting from the source device (110A) a route discovery request for transmitting data to the destination device (HOD). The route discovery request includes: a first field indicating a hop-count limit, a second field indicating a number of slots, X, required for transmitting the data, a third field indicating an ID for the source device (110A), and a fourth field indicating an ID for the destination device (HOD). The source device (110A) then receives a route discovery response indicating a route from the source device (110A) to the destination device (HOD). The route discovery response includes a first field indicating a number of hops between the source device (110A) and the destination device (HOD).

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