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(54) **SELECTION OF A MESH ACCESS POINT IN A WIRELESS MESH NETWORK**

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(57) **ABSTRACT**

An example method of transmitting data to a destination node in a wireless communications network includes detecting, at a wireless device, a plurality of mesh nodes connected to a common communications medium used to access a wireless communications network. The method also includes calculating a score for the mesh nodes of the plurality of mesh nodes, where the score is based on a hop distance between the respective mesh node and a root access point connected to the wireless communications network, the quality of signal between the wireless device and the respective mesh node, the data bandwidth between the wireless device and the respective mesh node, and/or the current number of mesh nodes using the respective mesh node as a wireless access point to connect to the wireless communications network. The wireless device selects a mesh node to connect to as a mesh access point based on the calculated scores.

20 Claims, 5 Drawing Sheets