CLAIMS

1. A method of determining a new Position for a Node n, said Node having a distance measuring radio, said method comprising the steps of:

a) Obtaining a list of Positions of a plurality of neighboring Nodes,

b) Analyzing the geometric relationship of the Positions in said list and the predicted Position of Node n,

c) Selecting subset of the Nodes from said list that is less than the total number of Nodes in said list,

d) Performing electronic distance measurements from Node n to each of said subset of Nodes,

e) Utilizing distances obtained in step d) to determine a new Position of Node n.

2. The method of Claim 1 wherein the selection in step c) is based on most favorable geometric relationship of Nodes in said list to the predicted Position of Node n.

3. The method of Claim 1 wherein step a) further comprises obtaining corresponding Confidence metrics for each said Position in said list, and the selection in step c) is based at least in part on said Confidence metrics.

4. The method of Claim 1 wherein the number of Nodes selected in step c) is at most 3.

5. The method of Claim 1 further comprising step f) transmitting said measured distances to said subset of Nodes.

6. The method of Claim 1 wherein step a) further comprises receiving a previously measured distance from at least one among a plurality of neighboring Nodes, and comprising step d) Performing electronic distance measurements from Node n to each of said subset of Nodes for which a previously measured distance was not received in step a).

7. The method of Claim 1 wherein if Node n is moving, performing the steps a) to e), otherwise if Node n is not moving taking no measurements and using the predicted Position of Node n as the new Position of Node n.

1. A method of determining a new position for a node, the node having a distance measuring radio, the method comprising:

a) obtaining a list of positions of a plurality of neighboring nodes;

b) analyzing a geometric relationship of the positions in the list and a predicted position of node;

c) selecting a subset of nodes from the list that is less than a total number of nodes in the list;

d) performing electronic distance measurements from the node to each of the subset of nodes; and

e) determining a new position of the node utilizing the electronic distance measurements obtained in step d).

2. The method of claim 1, wherein the selection of the subset is based on a most favorable geometric relationship of nodes in the list to the predicted position of node.

3. The method of claim 1, further comprising obtaining corresponding confidence metrics for each position in the list; and wherein the selection of the subset is based at least in part on the confidence metrics.

4. The method of claim 1, wherein a maximum number of nodes in the subset is 3.

5. The method of claim 1, further comprising transmitting the electronic distance measurements to the subset of nodes.

6. The method of claim 1, further comprising receiving a previously measured distance from at least one among the plurality of neighboring nodes; wherein the electronic distance measurements are performed from the node to each of the subset of nodes for which the previously measured distance was not received therefrom.

7. The method of claim 1, wherein if the node is moving, performing the steps a) to e), otherwise if the node is not moving, taking no measurements and using the predicted position of node as the new position of node.