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(54) **BEAM POINTING FINE TUNING FOR VEHICLE-BASED ANTENNAS**

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(57) **ABSTRACT**

A vehicle communication system includes a controller configured to be communicatively coupled to one or more antennas. The controller is also configured to adjust a beam during a period of time to be oriented at a plurality of pointing angles, and detect a plurality of sets of signal data for a received signal, where each set of signal data is detected at a different one of the pointing angles. The controller is further configured to identify a particular pointing angle based on the plurality of sets of signal data, reorient another beam from the given pointing angle to the particular pointing angle, and transmit or receive data, via the other beam while the other beam is oriented at the particular pointing angle, between a particular external node and at least one internal node.