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(54) **WIRELESS NETWORK FOR OBJECT AND
PATTERN DETECTION**

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(57) **ABSTRACT**

Systems and methods for detecting objects and motion using wireless networks can include determining beamforming control parameters for one or more transceivers, transmitting, by a processing device, the beamforming control parameters to the one or more transceivers, and receiving, from one or more of the transceivers, data representative of detected radio frequency reflection signals. They can also include determining, based on the aggregated data, whether an object detection criterion is satisfied within a target spatial area, and responsive to the determination that the object detection criterion is satisfied, transmitting a notification reflective of the satisfaction of the object detection criterion. They can further include adjusting, based on the data, the beamforming control parameters, and transmitting adjusted beamforming control parameters to one or more transceivers of the plurality of transceivers.

