

LOW COST, WIDE AREA RFID SYSTEM

ABSTRACT

5 Techniques for radio-frequency identification systems include sensor
systems having a sensor unit and one or more sensors and a server. The sensor system
includes one or more antennas at a location configured to receive signals from a tag
proximate to an antenna and a processor configured to process tag detection signals
based on the received signals. The processing may include selectively storing tag
10 detection signals received from one or more antennas and identify an event related to the
presence of a tag proximate to an antenna at the location. Sensor system may include a
transmitter configured to transmit a message indicating the event over a network to a
server. The server may be configured to process the message by analyzing a feature of
the signals related to the event. The analysis may evaluate an adjustment of a
15 configuration parameter used to operate an antenna. The configuration parameter may
be updated by the server, and the server may transmit a message indicating the
configuration parameter to the sensor system.

20 FIG. 2