

TECHNIQUES FOR DETECTING RFID TAGS IN ELECTRONIC ARTICLE SURVEILLANCE SYSTEMS USING FREQUENCY MIXING

Abstract

Disclosed are a system and method to detect RFID tags in electronic article surveillance systems using frequency mixing. The system includes an RFID module that includes an energy coupler to receive transmitted energy that includes a first signal at a first frequency and a second signal at a second frequency, and a mixing element to mix the first and second signals, to generate a third signal at a third frequency, and the energy coupler to transmit the third signal to an EAS detection system. Other embodiments are described and claimed.

Fig. 5