

Carrier Signal Leakage Suppression in Modulated Backscattered Interrogator Receivers

Abstract

A novel method to reduce the carrier signal leakage in a backscattered interrogator receiver is described. The method uses two diodes in a parallel and opposing polarity configuration connected in series with the signal path at the receiver front end to reduce the amplitude of the carrier leakage signal without having significant negative effect on the backscattered signal transmitted by an RF Identification Transponder. This method effects reduction in the carrier leakage signal amplitude at low cost compared to the other carrier leakage reduction schemes of the prior-art.

Figure 4

