ABSTRACT

Radar (Radio Detection and Ranging), which means the detection and radio spacing is an electromagnetic waves system used to detect, measure distances and create objects such as airplanes, military, and weather information.

For if it is installing two adjacent radar interference on both the radar will be huge for their mutual coupling in either of the antennas needed for both radar techniques that work with reduced maximum mutual coupling on both antenna.

Isolation technique is one of the techniques used in both the second antenna if the antenna has a large interference. Isolation techniques used are Space isolation. Space isolation is a technique used on two antennas with one antenna define the distance from the antenna to two. With this distance, the difference in the two antennas mutual coupling can be reduced and the antenna can work optimally.

In this design the antenna used is a microstrip antenna with a working frequency of 900 Mhz. On the isolation technique will be distinguished within both the vertical position (top-down) and horizontal (right-left) and then see the results of isolation (S1,2) (S2,1) on both. The result this would be the at what distance at the time of the vertical and horizontal position to get a minimum isolation of -20dB.

Keywords: Space isolation, Mutual coupling, Radar