

Microwave Security System in Museums: Design and Implementation

Authors : Dalia Elsheakh, Hala Elsadek

Abstract : The objective of this paper is to propose a competitive microwave security system that can be applied with reasonable price at museums in Egypt, considering the priceless elements in 23 Egyptian museums countrywide and the lack of good recent security systems even in big ones. The system main goal is to detect valuable targets to ensure their presence in the pre-defined positions in order to protect them from being stolen. The system is based on real time microwave scanning for the required space volume through transmitting RF waves at consecutive angles and detecting the back scattered waves from required objects to detect their existence at pre-specified locations.

Keywords : microwave security system, object locating system, real time locating system (RTLS), antenna array, array electronic scanning

Conference Title : ICCINS 2014 : International Conference on Communications, Information and Network Security

Conference Location : New York, United States

Conference Dates : June 05-06, 2014