

## **DESIGN AND ANALYSIS OF A MULTI LAYER SUBSTRATE SINGLE PATCH MICROSTRIP PATCH ANTENNA FOR ENHANCING THE BEAM WIDTH WITH CONTROL ON DIRECTIVITY**

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### **ABSTRACT**

This paper presents an efficient analysis of a micro strip antenna in terms of multilayered substrate and patch antennas. The present invention relates generally to the design and construction of micro strip antennas. More particularly, the invention relates to micro strip antennas having a plurality of interconnected segments which are disposed on successive layers of a multilayer substrate. The numerical results show that the present method is an efficient and accurate scheme for analyzing micro strip antennas in multilayered media. In general beam width of the antenna increasing with increasing the number of the substrate layers. There is a trade of between the beam width and the directivity of antenna. Here the beam width increasing for optimum value of the directivity.

**KEYWORDS:** Micro Strip, Rectangular and Circular Patch, Multilayer