

Abstract

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Wideband Circular Microstrip Antenna for Wireless Communication Systems

In the last few years wireless communication has come a long way and everyday new applications are being introduced. As versatile as these applications are, they all seem to demand specific requirements of antennas. Some of these requirements are light weight, small size and a large bandwidth. Several approaches have been taken in an attempt to enhance the performance of the antennas used in these applications which are mostly microstrip antennas for they meet most of the desired requirements. It is safe to say that they meet almost all the requirements except for having a large bandwidth for microstrip antennas have a small bandwidth but several techniques have been used in order to enhance their bandwidth and these techniques are shown later on in this thesis. The concept of microstrip radiators was first thought of in 1953 by Deschamps. However, microstrip antennas were not fabricated till about twenty years after this date .The first practical antennas were developed in the early 1970's by Howell and Munson. Since then there has been numerous research attempts of development of microstrip antennas and arrays, exploiting the numerous advantages of microstrip antennas and trying to workout the few flaws in order to make them more practical and useful for a larger variety of wireless applications