

Three Dimensional Lens-Antenna

Title:

Three dimensional Lens-antenna

Abstract

The miniaturized 3D antenna has been fabricated using one step microstereolithography process with a unique arrangement of off axis lens which ensures better resolution. The antenna is designed to resonate in Ka band and is devised considering space applications. The structure comprises of a glass substrate with a Lens like structure made of a photopolymer HDDA on top of it. The 3D structure out of HDDA is sputtered with gold for better radiation characteristics. The glass substrate with sputtered gold forms the ground plane of the proposed antenna. The antenna is fed with coplanar microstrip line also made of HDDA and gold film on top of it

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