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(57) Abstract :

The present disclosure relates to an UWB antenna structure for wireless communication wherein the antenna structure designed with a coplanar waveguide (CPW) feed patch. The structure includes a substrate. The substrate also includes an octagonal radiating geometry used with a T-type slot etched in a square-ground plane on the substrate. A beveling technique applied on a radiating patch extracted from the octagonal radiating geometry, a rotated C-type slot etched on the beveled radiating geometry. The rotated C-type slot is performed as a band stop filter, and configured to eliminate wireless local area network interference. Additionally, a fifth-order Gaussian pulse configured to use to evaluate time response behaviour of the antenna structure.

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