

Rotated-T slot antenna for cognitive radio operation in the 3.1–6 GHz frequency range

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A reconfigurable rotated-T slot antenna for cognitive radio operation in the lower part (3.1–6 GHz) of the UWB frequency range is presented. The antenna can operate one at a time at six adjacent sub-bands. The switching from one sub-band to another is done electronically using PIN diodes. The antenna exhibits a nearly omnidirectional radiation pattern in the horizontal plane of operation with predominantly vertical polarization.

Keywords: reconfigurable antennas; slot antennas; switchable antennas; PIN diode switches