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(57) Abstract :
 The present disclosure provides system (100) and method (200) for fabricating MIMO multi-band antenna having specific frequency bands for wireless network applications. The system (100) and method (200) include a single-port antenna (101) with wide impedance bandwidth which is configured to operate in pre-determined frequency bands. Further, it includes a radiating patch (102) with the partially formed ground plane which has pre-determined modifications. The system (100) further comprises a conducting means (103) for conducting a MIMO configuration assessment via simulation, a fabricating means (104) for fabricating said antenna, a validating means (105) for validating said antenna through measured results, comparing means (106) for the measured results with simulation values, and analyzing means (107) to analyze specific absorption rate (SAR) of said antenna.

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