Abstract

A compact planar inverted-F multi-band antenna array located on an infinite ground plane for multiple inputs multiple output (MIMO) systems is proposed in this paper. And the study of the suppression of the mutual coupling between the radiating elements of the antenna array is also presented. An identical two PIFA elements are placed uniquely without any distance to each other however; the mutual coupling reduction is achieved by maximizing the separation between them. The multi-band antenna array is designed to operate at GSM [880-960 MHz],
Mutual Coupling between the Elements of a MIMO Antenna Array for GSM/UMTS/PCS Applications

UMTS [1920-2170 MHz] and PCS [1880-1950 MHz] frequencies bands for MIMO application, and studied numerically regarding mutual coupling suppression. The simulation analysis was performed using the Ansoft High Frequency Structure Simulator (HFSS).

References

- Vergerio S. , "Recherche des caractéristiques optimales d'antennes multi-capteurs pour les systèmes mimo"; Université de Provence, 2007.

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Keywords

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