Design of a High Q Multifrequency Notch Filter with the Help of Frequency Selective Surface Having Square Spiral Patch Array

IJCA Special Issue on International Conference on Computing, Communication and Sensor Network

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CCSN2012 - Number 1

Year of Publication: 2013

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Abstract
This paper deals with the theoretical investigation on high Q (80.50 approx) multifrequency Notch type Frequency Selective Surface (FSS). The FSS is designed by cutting spiral slit into square shaped patch keeping same periodicity throughout. Compared to conventional square patch FSS the designed FSS can provide reduction in resonant frequency resulting in size reduction up to 95.20% with respect to 2.63GHz resonant frequency. The multiple (fourteen) resonating frequencies have been obtained with the help of this design. Theoretical investigations have been done by Ansoft Designer® software.

References


Index Terms

Computer Science
Computing, Communication
And Sensor Network

Keywords

Frequency Selective Surface  Method Of Moment  Slit  Size Reduction  Resonating Frequency  Q  Factor  Notch Filter