Abstract

In this paper, a single-layer bandstop Frequency Selective Surface (FSS) is proposed for Wireless Local Area Networks (WLAN) Applications. The unit cell of the proposed FSS consists of a modification in a square patch element by the insertion of triangular shaped slots. The designs demonstrate a wide 3.8 GHz stopband in the WLAN frequency range. Moreover, it shows angular stability at various angles of incidence up to 40°.

References

“All-Dielectric Frequency Selective Surface for High Power Microwaves”, IEEE Transactions on

Fabry-Pérot antenna with cascaded frequency selective surfaces”, Microwave and Optical

Design by Frequency-Selective Surface for WLAN Application”, Progress In Electromagnetics
Research C (PIER C), 54, 57 – 66, 2014.

stacked high gain antenna with frequency selective surface”, Microwave and Optical technology

8. R. Sivasamy, B. Moorthy, M. Kanagasabai, J. V. George, L. Lawrance and D. B.
Rajendran, “Polarization-independent single-layer ultra-wideband frequency-selective surface”,

Single-Layer UWB Polarization Stable FSS for Electromagnetic Shielding Applications”, In
Proceedings of the 2014 iWAT International Workshop on Antenna Technology, 220 – 223,
2014.

Frequency Selective Surface with high angular stability”, In Proceedings of 2013 SBMO/IEEE
MTT-S International Microwave and Optoelectronics Conference (IMOC), 1 – 4, 2013.

**Index Terms**

Computer Science  Wireless

**Keywords**

Frequency selective surfaces, angular stability, polarization independence, WLAN.