

Suppressing unwanted bands for a triple-band antenna using electromagnetic bandgap structures

黃俊諺、吳俊德

E-mail: 321368@mail.dyu.edu.tw

ABSTRACT

This thesis shows a triple-band antenna feeding by a coplanar waveguide (CPW). By adding two rings on a gap patch, two extra bands will be generated. By using electromagnetic simulator HFSS to discuss the related geometrical parameters, we can get the design rules related to those geometrics. Using those design rules, one can easily design a triple-band antenna for DCS/PCS, WLAN and WiMax. Besides, this thesis provides an idea to suppress unwanted bands by electromagnetic band-gap (EBG).

Keywords : EBG、CPW

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