應用於無線通訊裝置之頻率選擇面縮小化設計

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摘 要

本篇論文提出一應用於無線通訊裝置之頻率選擇面縮小化設計。此一帶通縮小化頻率選擇面對於特定頻段具有很好的穿透率，並且在此通訊頻段外具有高度的屏蔽效率，此外對於不同極化及入射角度的平面波也具有優越的共振穩定性。利用此縮小化頻率選擇面製作成一帶通屏蔽體，其內部之天線的阻抗頻寬與天線場型僅有些微的影響。

本論文先由數值模擬軟體來討論設計此縮小化頻率選擇面之過程，由最終模擬的結果來看，此縮小化設計的頻率選擇面的確能達成所要求的目標。再經由實做一個原型來驗證此架構的效能，模擬及實作的結果都能得到預期的效果，由此驗證此縮小化頻率選擇面設計的可行性。

關鍵詞 : 頻率選擇面、空間濾波器、縮小化之週期結構

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