應用OFDM-256 多重擷取技術於IEEE 802.16(WiMax) 協定中的開發與研究

沈佑龍、陳雍宗

E-mail: 9611991@mail.dyu.edu.tw

摘 要

中文摘要 本論文主旨在研究正交分頻多工(orthogonal frequency division multiplexing, OFDM) 系統，工作於複雜且失真的多工衰落通道 (fading channel) 內，效能分析運作中的 OFDM 系統，工作在路徑分支具有相互關係之上的Weibull分布，而且在任意的衰落參數進行通道測試。在此論文中所提的內容，係研究探討耙式接收機(RAKE receiver)，並提出機率密度函數 (probability density function, PDF) 與累積分布函數 (cumulative distribution function, CDF)，最後為了驗證推導方程式的正確性，並以相關數據證實，也與Weibull衰落分布具相關性的方程式進行比對與分析。

關鍵詞 : 正交分頻多工系統 (OFDM)、 ; Weibull 衰落通道 ; 位元錯誤率 (BER)、 ; 選擇性合成 (selective combining)

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