Cutting Edge of Frequency Hopping Spread Spectrum in Wireless Communication Using MFSK Modulations

The paper is focus on the performance of fast frequency hopped spread spectrum by using M-ary frequency shift keying (MFSK) modulations. In fast FH systems, the frequency-hop rate Rh is some multiple of the symbol rate. Basically, each (M-ary) symbol interval is subdivided into N subintervals, which are called chips and one of M frequencies is transmitted in each subinterval. The probability of error for noncoherent detection of binary FSK for each hop with p =0.01 is discussed in this paper.