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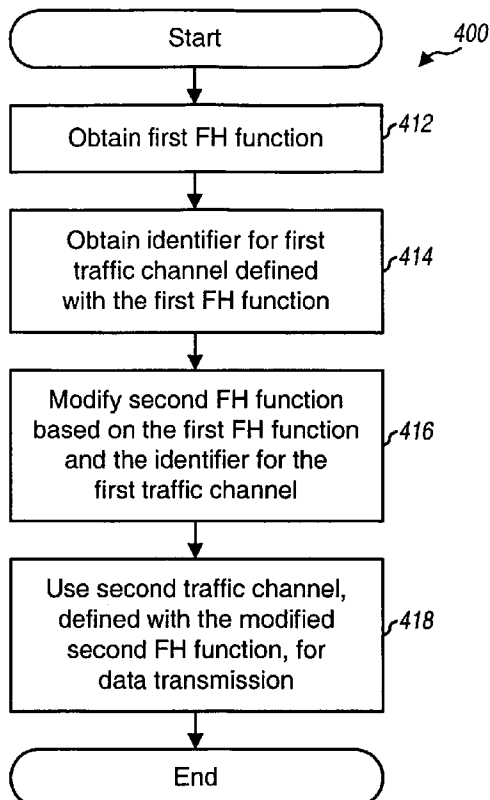
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(54) Title: INTERFERENCE MANAGEMENT FOR SOFT HANDOFF AND BROADCAST SERVICES IN A WIRELESS FREQUENCY HOPPING COMMUNICATION SYSTEM



(57) Abstract: Techniques are provided to manage interference for soft handoff and broadcast services in a wireless frequency hopping communication system (e.g., an OFDMA system). These techniques may be used for the forward and reverse links. In a first scheme, an FH function $f_{\text{sho}}(r, T)$ is used for soft-handoff users, an FH function $f_{\text{si}}(k, T)$ is used for users not in soft handoff in each sector S_i , and the FH function $f_{\text{si}}(k, T)$ is modified to be orthogonal to the FH function $f_{\text{sho}}(r, T)$ if and when necessary. In a second scheme, the FH function $f_{\text{sho}}(r, T)$ used for soft-handoff users is defined to be orthogonal to or have low correlation with the FH function $f_{\text{si}}(k, T)$ used for users not in soft handoff in each sector S_i , so that modification of the FH function $f_{\text{si}}(k, T)$ is not needed. The FH function $f_{\text{si}}(k, T)$ for each sector may be defined to be pseudo-random with respect to the FH functions $f_{\text{si}}(k, T)$ for other sectors.



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