

## ***Abstract: Iterative Equalization Scheme of Power Line Communication Systems for Ubiquitous Healthcare Applications***

Yoon Hyun Kim, Jin Young Kim

*Department of Wireless Communications Engineering, Kwangwoon University, Wolgye-Dong, Nowon-Gu, Seoul, 447-1 Korea  
{yoonhyun, jinyoung}@kw.ac.kr*

### **Abstract**

In this paper, we propose and simulate Turbo equalizer scheme with zero-forcing (ZF) and minimum mean square error (MMSE) for high speed power line communication (PLC) systems. Because PLC systems suffer from impulsive noise and multipath fading, inter-symbol interference (ISI) occurs. In order to overcome the effect of ISI, we utilize Turbo equalizer scheme for achieving performance improvement. The performance is evaluated in terms of bit error rate (BER). From simulation results, we confirm that system performance can be significantly improved when the Turbo equalizer employed. It is also confirmed BER performance improves as the number of iteration increase.

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