poor and the path loss is large, the signal from the base station suffers the attenuation. he proposed scheme applies AF scheme and MMSE detection scheme. Therefore, the proposed scheme provides high BER performance. It means the proposed scheme is useful for the wireless communication system.

**Acknowledgments.** This research was supported by Basic Science Research Program through the National Research Foundation of Korea(NRF) funded by the Ministry of Science, ICT and future Planning(No. 2013R1A2A2A01067708) and was supported by the IT R&D program of MOTIE/KEIT [10054819, Development of modular wearable platform technology for the disaster and industrial site].

## References

1. Lars-T. B, Abdreas. S, Pascal. P, Daniel-M. S.: MIMO Power Line Communications. In: IEEE Communications Surveys & Tutorlals, vol.17, pp.106--124, (2015)
2. Daniel R. F, Marcio C., Walter F. Jr.: Space-Time Diversity and Spatial-Multiplexing MIMO Cooperative Scheme for Wireless Communication Systems. In: IEEE 22nd International Symposium on personal, pp.1657--1661, (2011)
3. lun W. and Shaoqian L.: Soft-output MIMO MMSE OSIC Detector under MMSE Channel Estimation In: IEEE Conference Publications, pp.1117—1121, (2008)

Copyright © 2016 SERSC 