

Trellis Coded Modulation With Outer RS Codes For Communication Over Rayleigh Fading Channels

Al-Semari, S. Biyari, K.H.; Dept. of Electr. Eng., King Fahd Univ. of Pet. Min., Dhahran;
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King Fahd University of Petroleum & Minerals

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Summary

This paper considers trellis-coded M-ary phase shift keying (MPSK) when used with powerful outer Reed-Solomon (RS) codes over frequency-non-selective slowly-fading Rayleigh distributed fading channels. RS codes are used to combat further the fading effects that could not be compensated by the inner TCM decoder. Results obtained indicate that the use of the proposed system does provide a significant reduction in the bit error probability while maintaining an acceptable bandwidth efficiency

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