

AbstractCommunication System Employing Turbo Codes and a Hybrid Automatic
Repeat Request Scheme

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A communications system employs a HARQ method and, for at least some transmission formats, incremental redundancy (IR) signals. For such formats, the multiple IR signals are derived from a single turbo encoded signal by forming multiple permutations of the encoded signal. The permutations are then
10 converted to the coding rate of the selected transmission format. It is demonstrated by simulation that the present proposal achieves a better performance than the known HARQ techniques, while its implementation is simpler. For certain transmission formats, the transmitted signal in response to a retransmission request is identical to the first transmitted signal.

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[Fig. 1]