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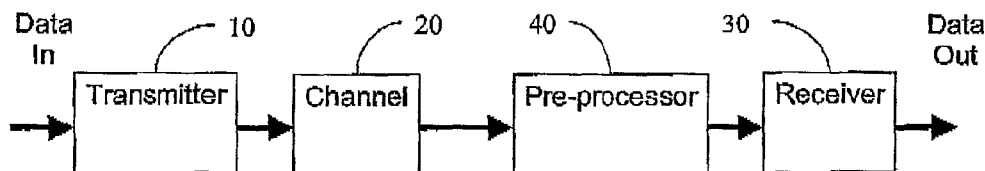
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(54) Title: IMPROVING RECEIVER PERFORMANCE IN A COMMUNICATION NETWORK



(57) Abstract: Methods and apparatus are described for improving receiver performance in a multicarrier communication network in which an encoded symbol (250) is transmitted over a transmission channel (20) in the communications system. A model of the transmission channel (20) is estimated (718, 760), said model characterising an effect of intercarrier interference on at least one carrier in the multicarrier system. The received symbol (250) is decoded (720, 762) using the estimated model to remove a predicted effect of intercarrier interference. A pre-processor (40) is also described for operation in conjunction with a communications receiver (30) in the network. The pre-processor (40) includes a channel estimator (42) operable to estimate at least one feature of the communication channel based on a received signal. The pre-processor (40) modifies the received signal dependent on the at least one estimated feature and provides the modified signal to the communications receiver (30).

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