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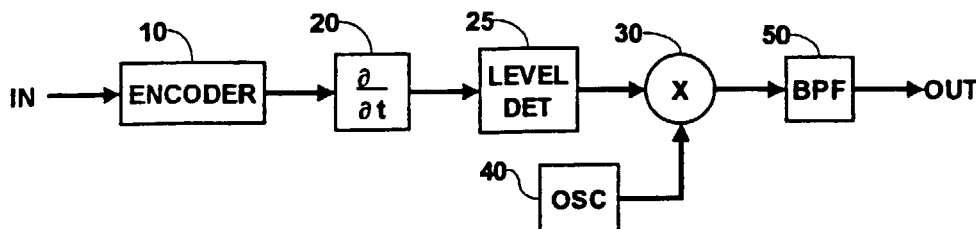
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(54) Title: A MODULATION TECHNIQUE PROVIDING HIGH DATA RATE THROUGH BAND LIMITED CHANNELS



(57) **Abstract:** A digital data modulator (Fig. 1) is coupled to a source (IN) of a digital data signal. An encoder (10) encodes the digital data using a variable pulse width code. A pulse signal generator (20, 25) generates pulses representing edges of the encoded digital data signal. A carrier signal generator (30, 40) generates a carrier signal having carrier pulses corresponding to the pulses from the pulse signal generator. A corresponding digital data demodulator (Fig. 3) is coupled to a source (IN) of a modulated signal having carrier pulses spaced relative to each other to represent a variable pulse width encoded digital data signal. A detector (140) generates a variable pulse width encoded signal in response to received carrier pulses. A decoder (150) decodes the variable pulse width encoded to generate the digital data signal.