

METHOD AND APPARATUS FOR DECODING NOISY, INTERMITTENT DATA,
SUCH AS MANCHESTER ENCODED DATA OR THE LIKE

ABSTRACT OF THE DISCLOSURE

According to a broad aspect of the invention, an apparatus (34) for decoding a Manchester encoded data stream is provided. The apparatus includes a transition detector (45) for receiving the Manchester encoded data stream to produce a transition indicating output when a transition of the Manchester encoded data stream is detected. Also, a circuit (105) is provided to generate an output control pulse a predetermined time after the transition indicating output is produced. A sampling flip-flop (120) receives the Manchester encoded data stream, and is controlled by the output control pulse to output a state of the Manchester encoded data to an output control circuit (125) when the output control pulse is generated. In a preferred embodiment, the sampling flip-flop (125) operates to generate a binary NRZ form of the Manchester encoded data stream. The transition detector (45) may be configured to synchronize the transition indicating output with a pulse of a clock pulse stream, and also may include a phase selector to select either the first or second symbol of the Manchester data to the output of the apparatus.

Figure 5