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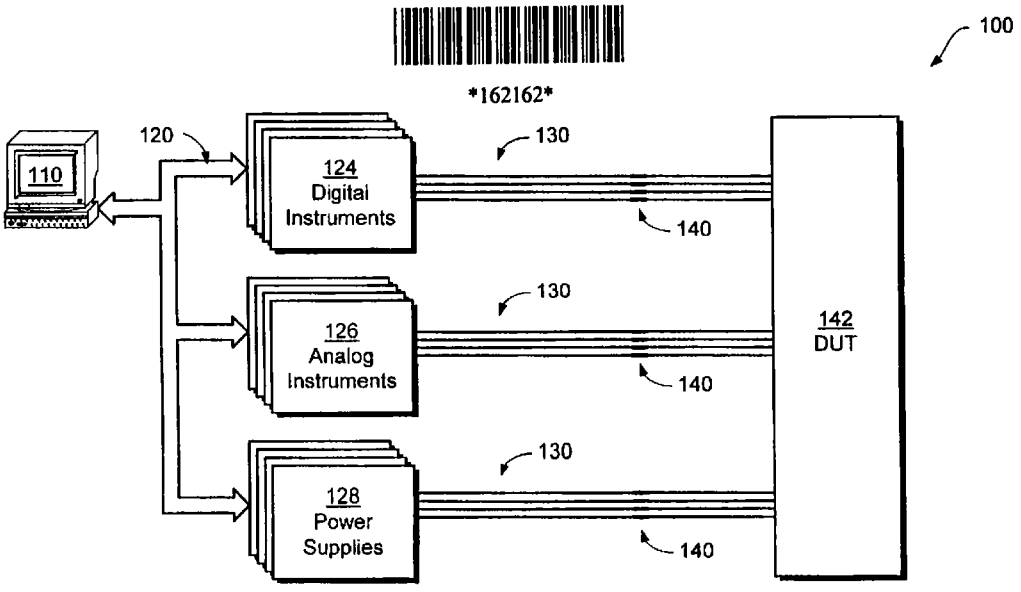
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(54) Title: ENHANCED LOOPBACK TESTING OF SERIAL DEVICES



(57) Abstract: An instrument for economically yet thoroughly testing serial ports employs a receiver and a transmitter. The receiver can be coupled to a TX line of a serial port for receiving a serial bit stream. The transmitter can be coupled to an RX line of the serial port for generating a serial bit stream. The receiver is coupled to the transmitter for establishing a loopback connection between the TX and RX lines of the serial port. A time distortion circuit and a selector are interposed between the receiver and the transmitter. The time distortion circuit adds predetermined amounts of timing distortion for testing the serial port. The selector selects between the receiver and a direct input, which provides an algorithmic test signal. The algorithmic test signal differs from the input serial bit stream received by the receiver to allow the TX and RX lines to be independently tested.

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