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(54) Title: THREE PHASE AND POLARITY ENCODED SERIAL INTERFACE

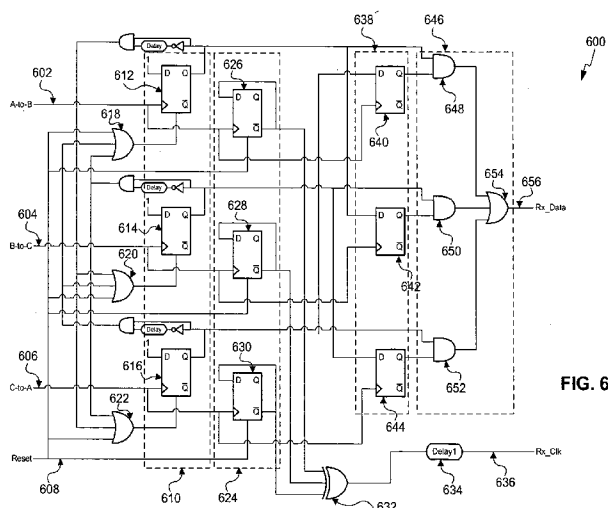


FIG. 6

(57) Abstract: A high speed serial interface is provided. In one aspect, the high speed serial interface uses three phase modulation for jointly encoding data and clock information. Accordingly, the need for de-skewing circuitry at the receiving end of the interface is eliminated, resulting in reduced link start-up time and improved link efficiency and power consumption. In one embodiment, the high speed serial interface uses fewer signal conductors than conventional systems having separate conductors for data and clock information. In another embodiment, the serial interface allows for data to be transmitted at any speed without the receiving end having prior knowledge of the transmission data rate. In another aspect, the high speed serial interface uses polarity encoded three phase modulation for jointly encoding data and clock information. This further increases the link capacity of the serial interface by allowing for more than one bit to be transmitted in any single baud interval.



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