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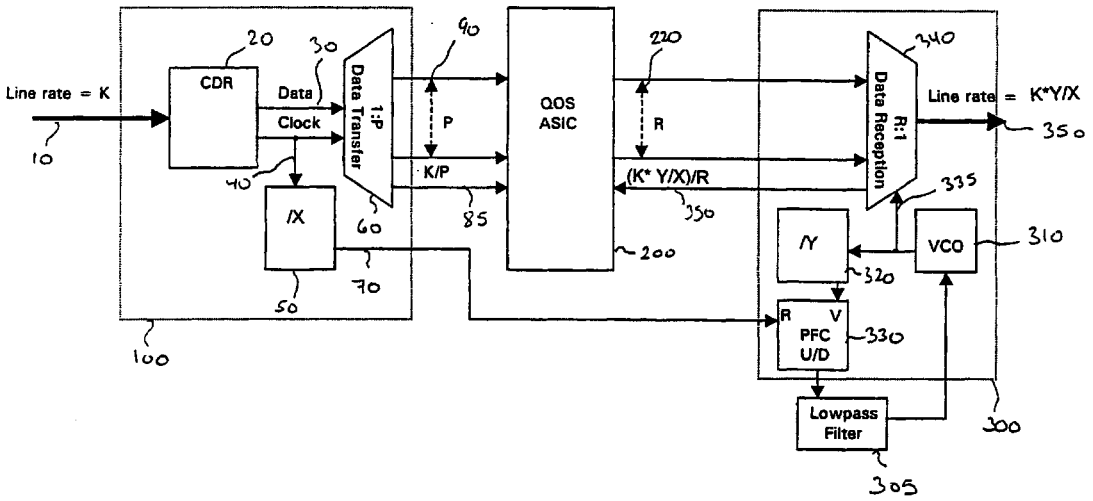
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(54) Title: A MULTI-RATE TRANSPONDER SYSTEM AND CHIP SET



(57) Abstract: A multi-rate transponder system and circuit for receiving an incoming serial data stream and transmitting an outgoing serial data stream are disclosed. The system comprises a receiving part comprising a Clock and Data Recovery circuit, a data transfer circuit, a clock transfer circuit and a reference clock circuit, and a system controller comprising system data receiving means, system data transfer means, system data processing means and a slide-buffer, and a transmitting part comprising a transmitter Phase Locked Loop adapted to generate an output clock signal, a transmitter clock circuit, and a data reception circuit adapted to receive the outgoing data signal from the system data transfer means and to generate the serial outgoing data stream at the nominal bit rate or at the corresponding transport network bit rate independently of the bit rate of the incoming serial data stream, based on the outgoing data signal and the output clock signal.

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