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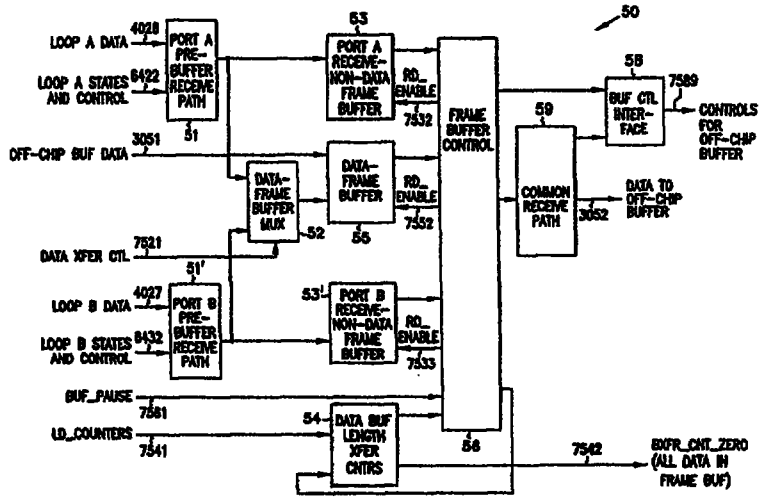
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(54) Title: METHOD AND DEDICATED FRAME BUFFER FOR LOOP INITIALIZATION AND RESPONSES



(57) Abstract

A fibre–channel loop interface circuit that includes a dedicated transmit–frame buffer for loop initialization and responses ("responses" are non–data frames sent in response to commands or inquiries from other nodes). Having a dedicated transmit–frame buffer allows one port of a dual–port node to be transmitting initialization or response frames while another port is transmitting data frames, response frames, or initialization frames. Either or both ports can also be simultaneously receiving frames. The system includes a channel node having dual ports, each supporting a fibre–channel arbitrated–loop serial communications channel, and dedicated frame buffers within the channel node for loop initialization and responses. In some embodiments, the dedicated frame buffers are configured as on–chip buffers and include: two inbound non–data buffers (53, 53') coupled to the two ports, a data–frame buffer (55) coupled to both ports, and an outbound transmit–frame buffer coupled to at least one of the ports. In addition, a method for loop initialization and responses using the dedicated buffer is described.