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(54) Title: SYSTEM FOR PULSED LASER OPTICAL DATA TRANSMISSION WITH RECEIVER RECOVERABLE CLOCK

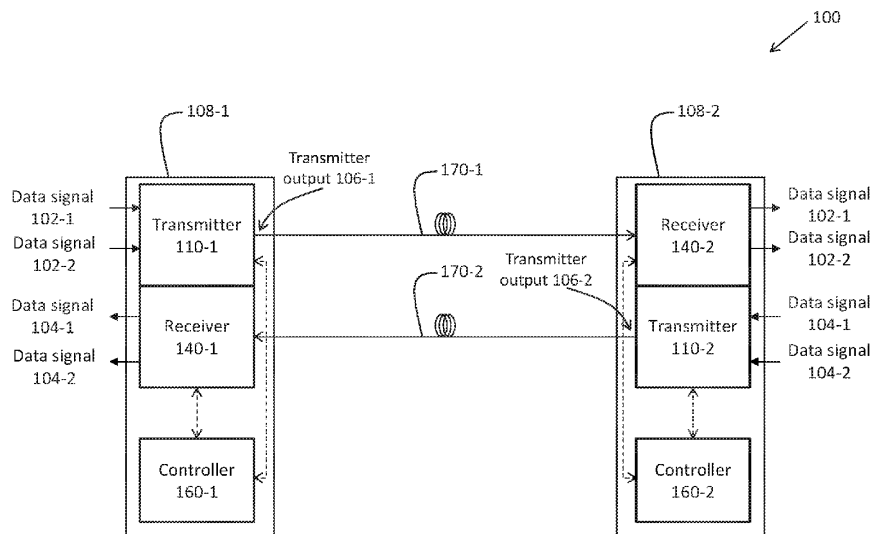


FIG. 1A

(57) Abstract: A system, comprising an optical transmitter configured to modulate a pulsed laser signal based on a plurality of data signals to form a plurality of modulated optical data signals, optical time division multiplex the plurality of modulated optical data signals to obtain a multiplexed optical data signal, and transmit the multiplexed optical data signal together with an optical clock signal derived from the pulsed laser signal; and an optical receiver that includes a clock recovery branch configured to recover the optical clock signal into a plurality of phase-shifted recovered optical clock signals and a data branch with a plurality of saturable absorbers (SA), each SA being in optical communication with one of the phase-shifted recovered optical clock signals and configured to receive the multiplexed optical data signal and to transmit of one of the plurality of modulated optical data signals according to the recovered optical clock signal.

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