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(54) Title: OPTICAL TRANSMITTER WITH OPTICAL RECEIVER-SPECIFIC DISPERSION PRE-COMPENSATION

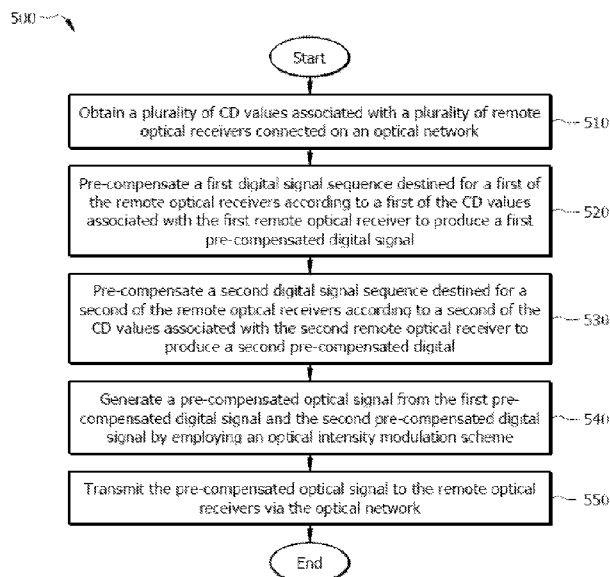


FIG. 5

(57) Abstract: An apparatus comprising a digital signal processor (DSP) unit configured to perform fiber dispersion pre-compensation on a digital signal sequence based on a dispersion value to produce a pre-compensated signal, wherein the dispersion value is associated with a remote optical receiver, a plurality of digital-to-analog converters (DACs) coupled to the DSP unit and configured to convert the pre-compensated signal into analog electrical signals, and a frontend coupled to the DACs and configured to convert the analog electrical signals into a first optical signal, adding a constant optical electric (E) -field to the first optical signal to produce a second optical signal, and transmit the second optical signal to the remote optical receiver.

