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(54) Title: INTEGRATED COHERENT RECEIVER FOR DISTRIBUTED FIBER SENSING APPARATUS

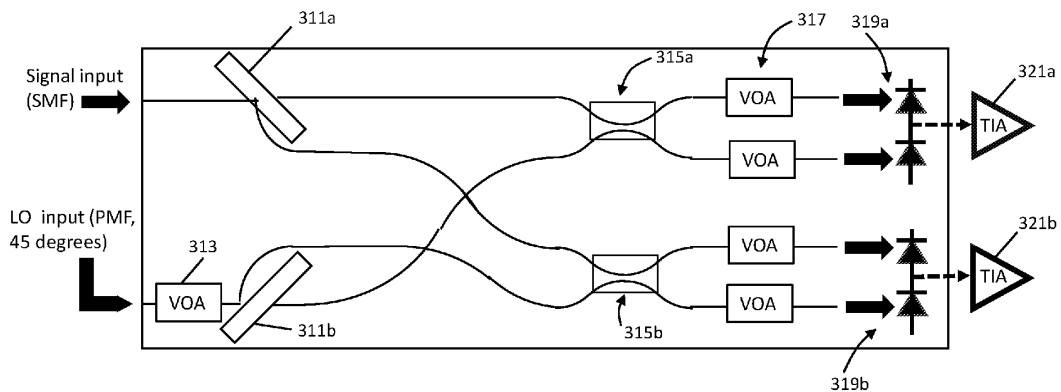


FIG. 3

(57) Abstract: A distributed fiber sensing system may use an integrated coherent receiver. The integrated coherent receiver may include a planar lightwave circuit having optical signal paths for separately operating on a signal input and a local oscillator input in a first polarization state and a second polarization state, wherein the operations include mixing of the signal input and the local oscillator signal in the first polarization state, mixing of the signal input and the local oscillator signal in the second polarization state, and equalizing the mixed signals.

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