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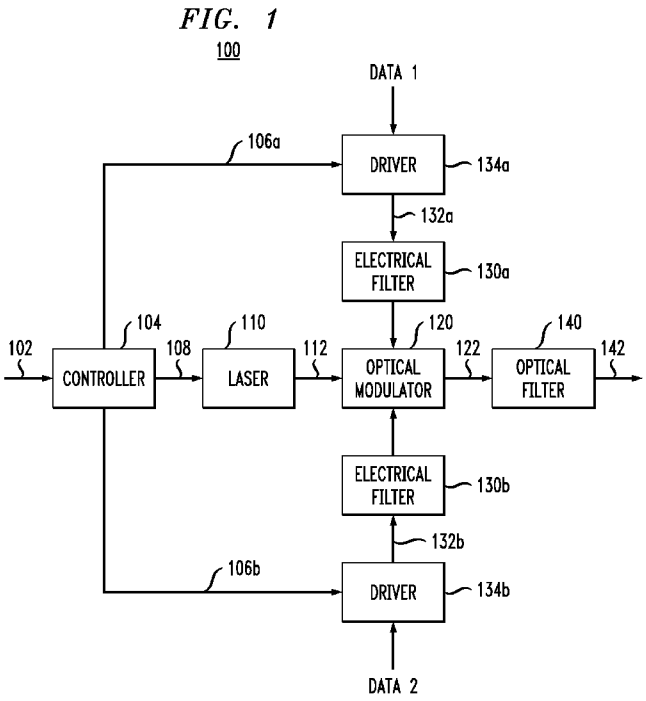
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(54) Title: HIGH-SPEED OPTICAL MODULATION USING A QUANTUM-WELL MODULATOR



(57) Abstract: An optical transmitter having a quantum-well (QW) modulator and a method of operating the same. The QW modulator is configurable to perform both amplitude and phase modulation. Using the disclosed methods, the length of the QW modulator, one or more drive voltages, and/or an operating wavelength can be selected to enable the optical transmitter to generate a modulated optical signal having a relatively high bit rate, e.g., an optical duobinary signal having a bit rate greater than about 80 Gb/s.

WO 2010/107852 A3