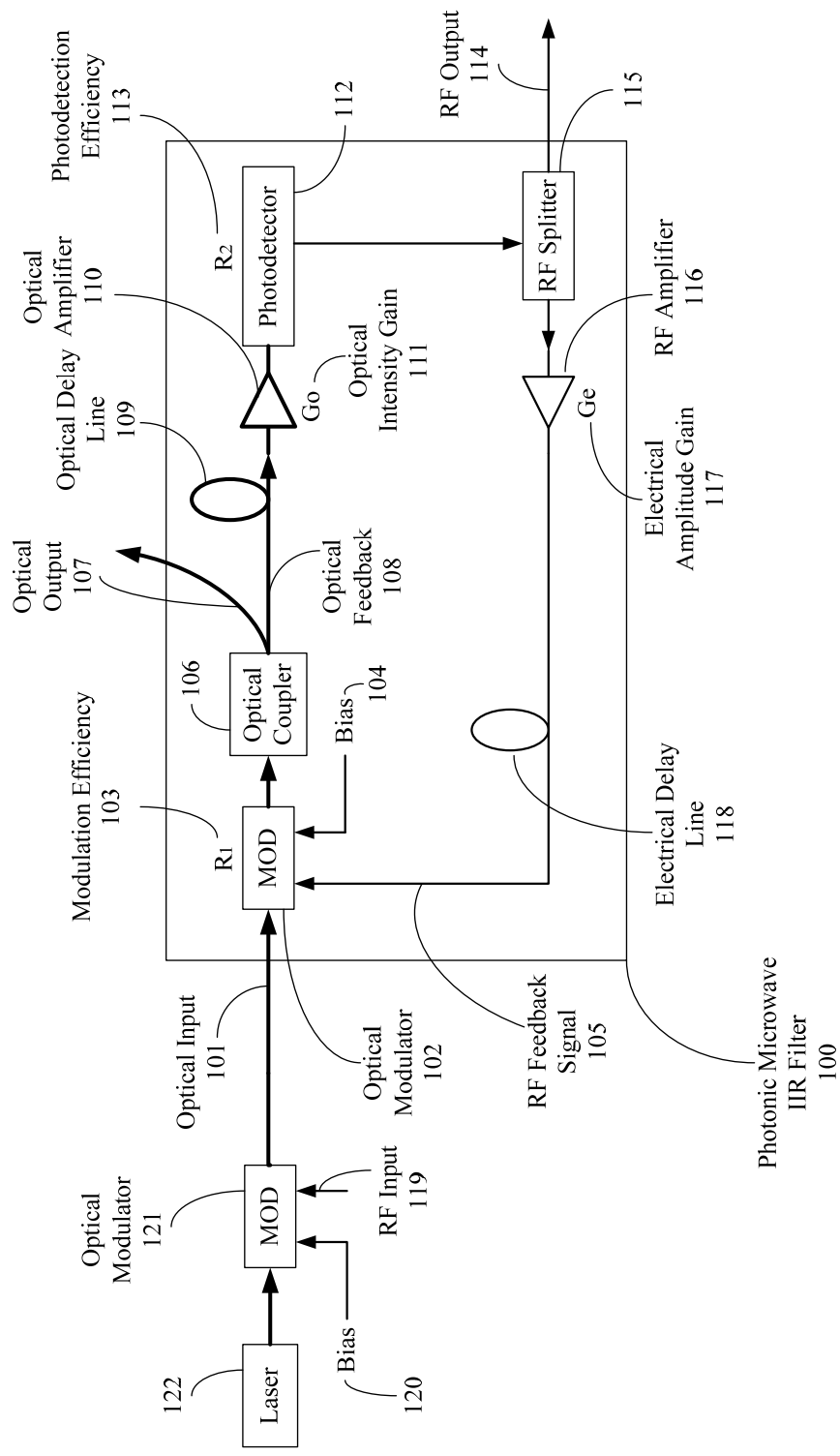
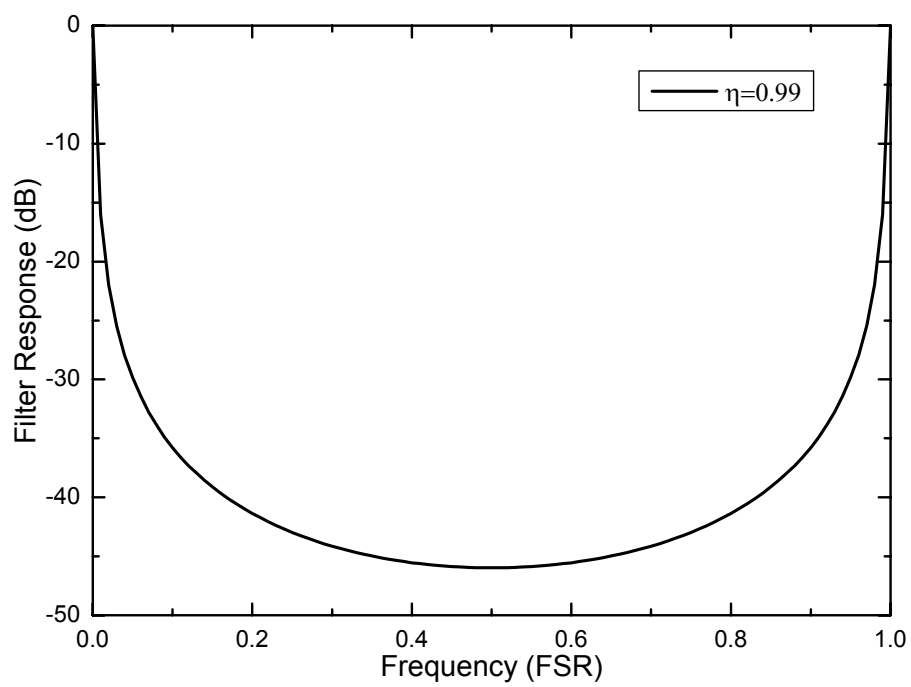




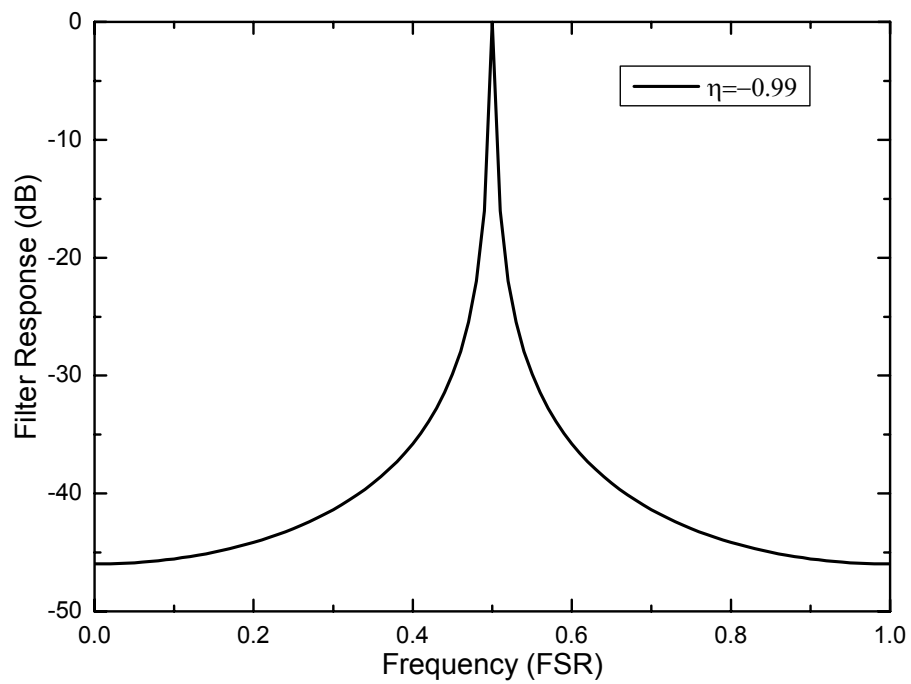
The opto-electronic circuits for the photonic microwave filter with infinite impulse response (IIR)

FIG 1



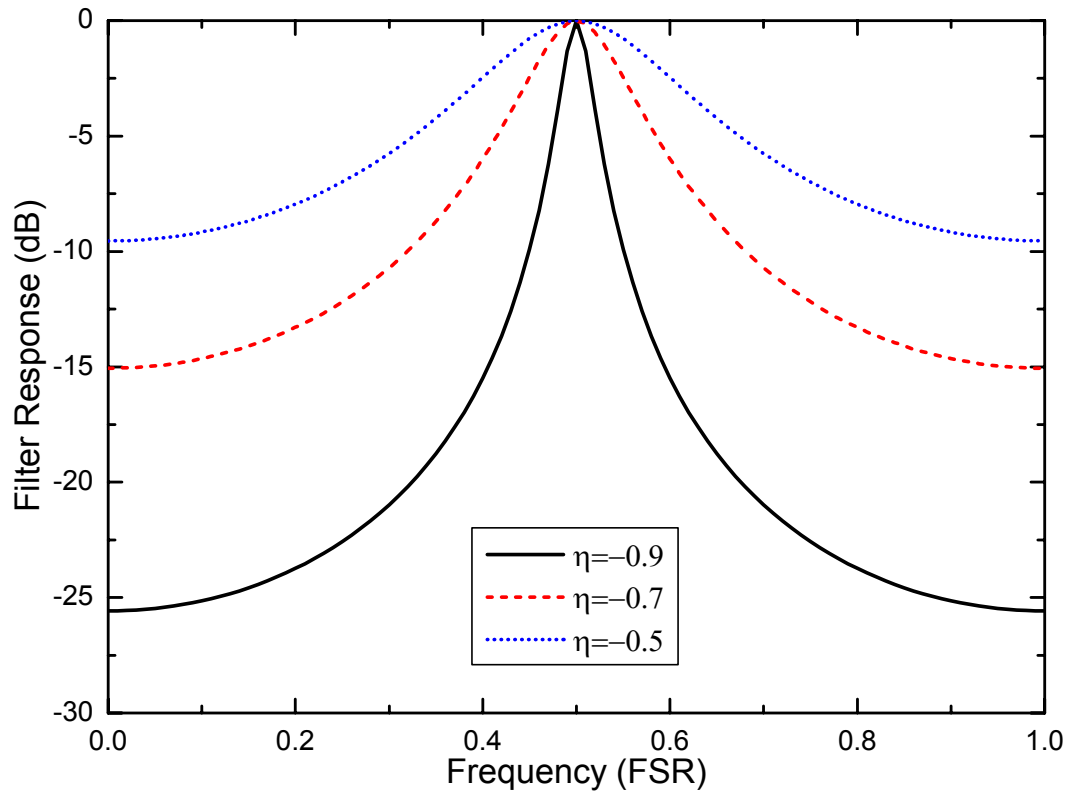
Calculated filter response with $\eta = 0.99$

FIG 2A



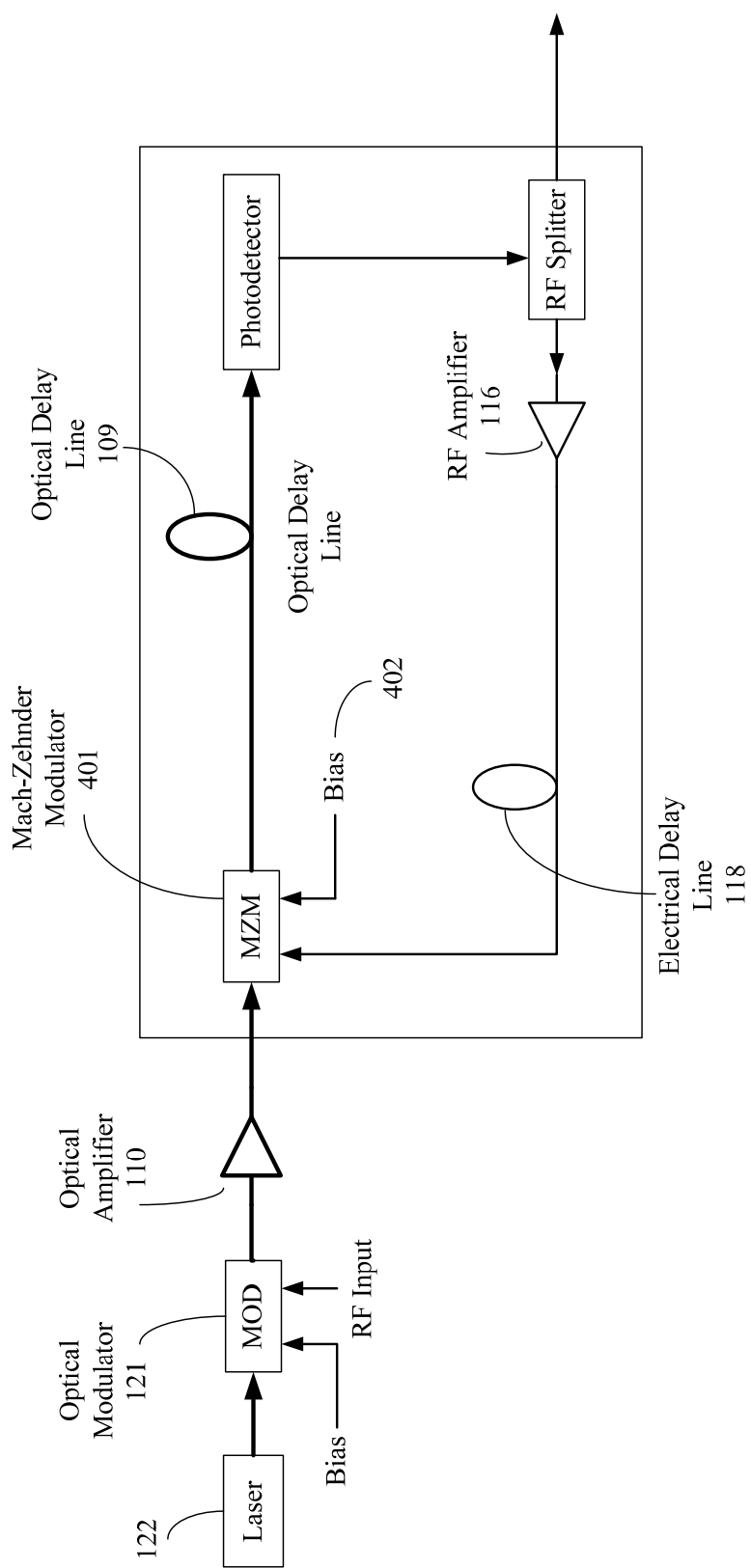
Calculated filter response with $\eta = -0.99$

FIG 2B



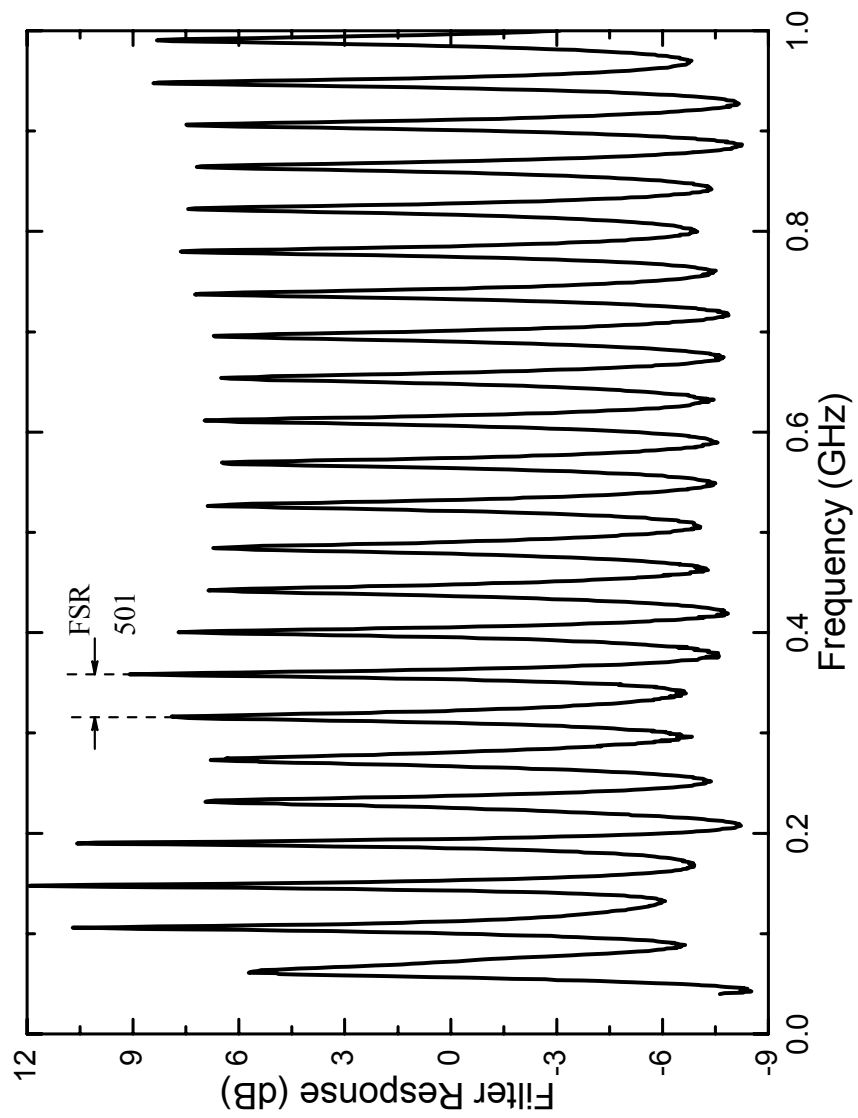
Calculated filter response with $\eta = -0.9$, $\eta = -0.7$ and $\eta = -0.5$

FIG 3



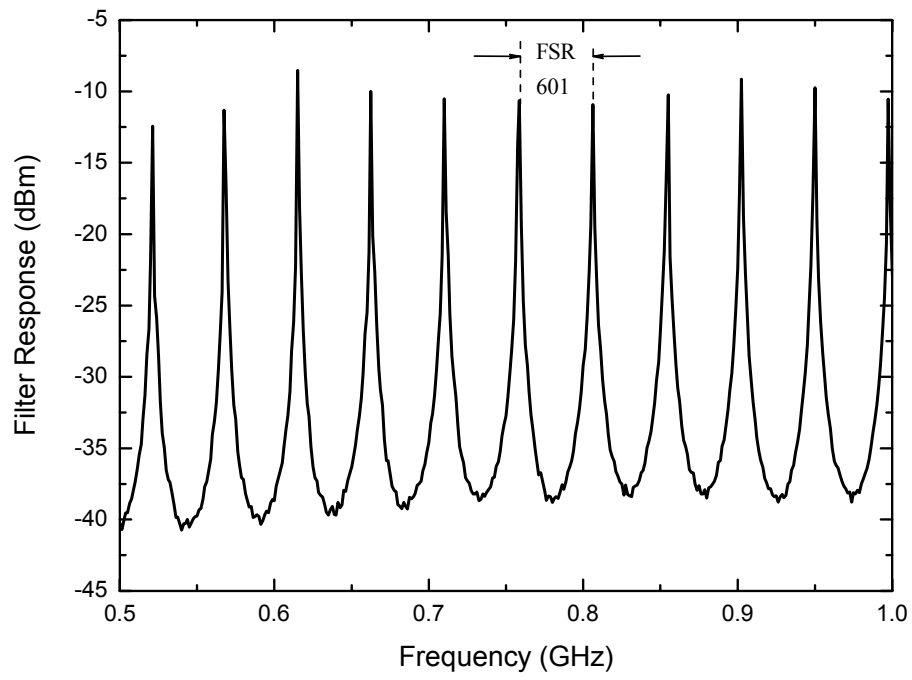
One embodiment and the experiment setup for the photonic microwave filter with infinite impulse response (IIR)

FIG 4



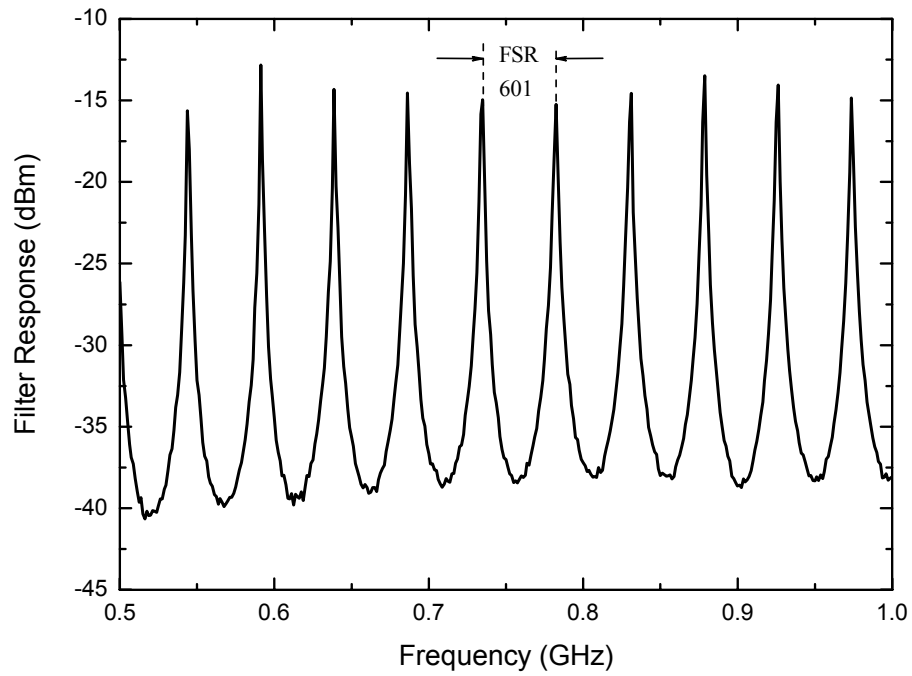
Measured filter response in the band of 0.04 – 1 GHz

FIG 5



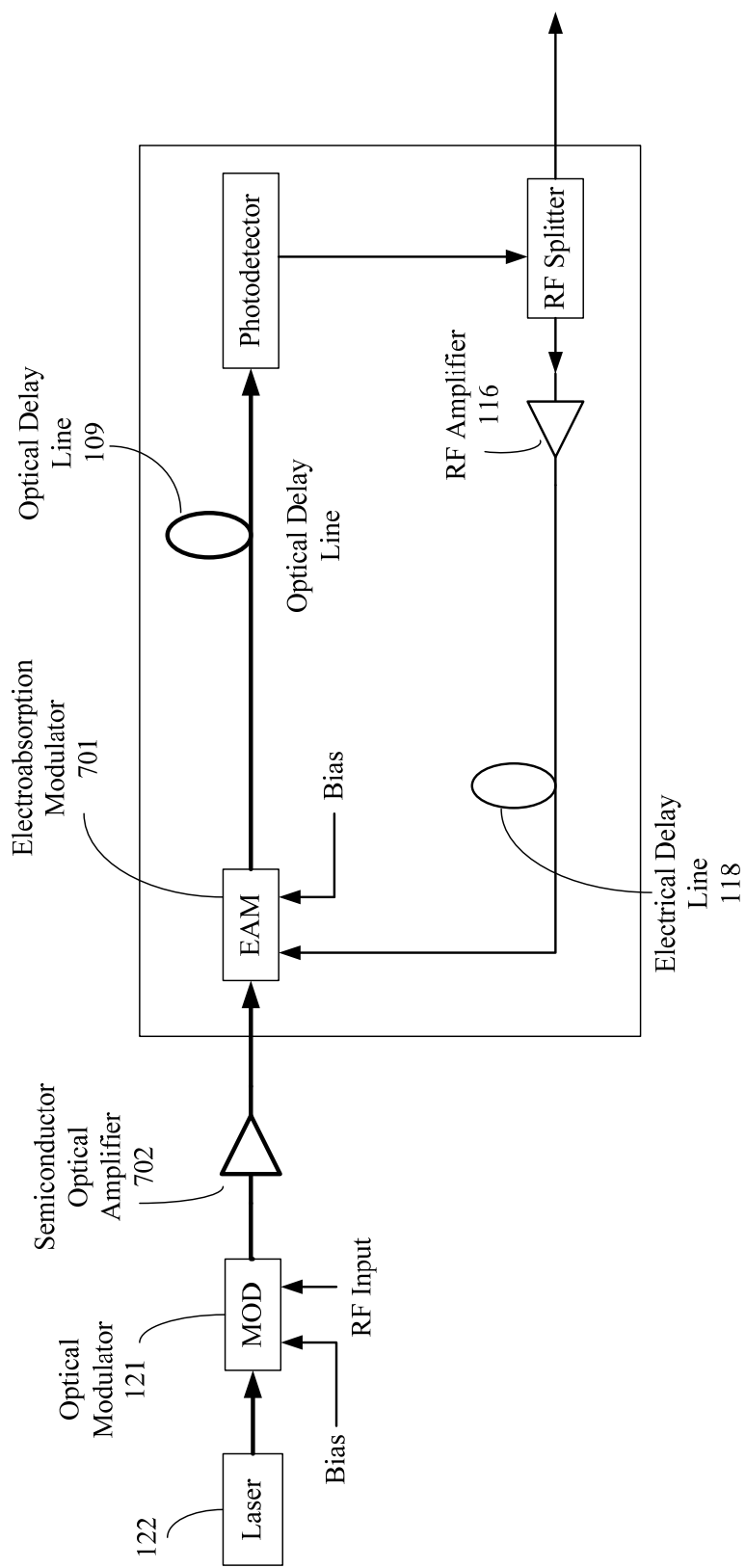
Measured filter response in the band of 0.5 – 1 GHz

FIG 6A



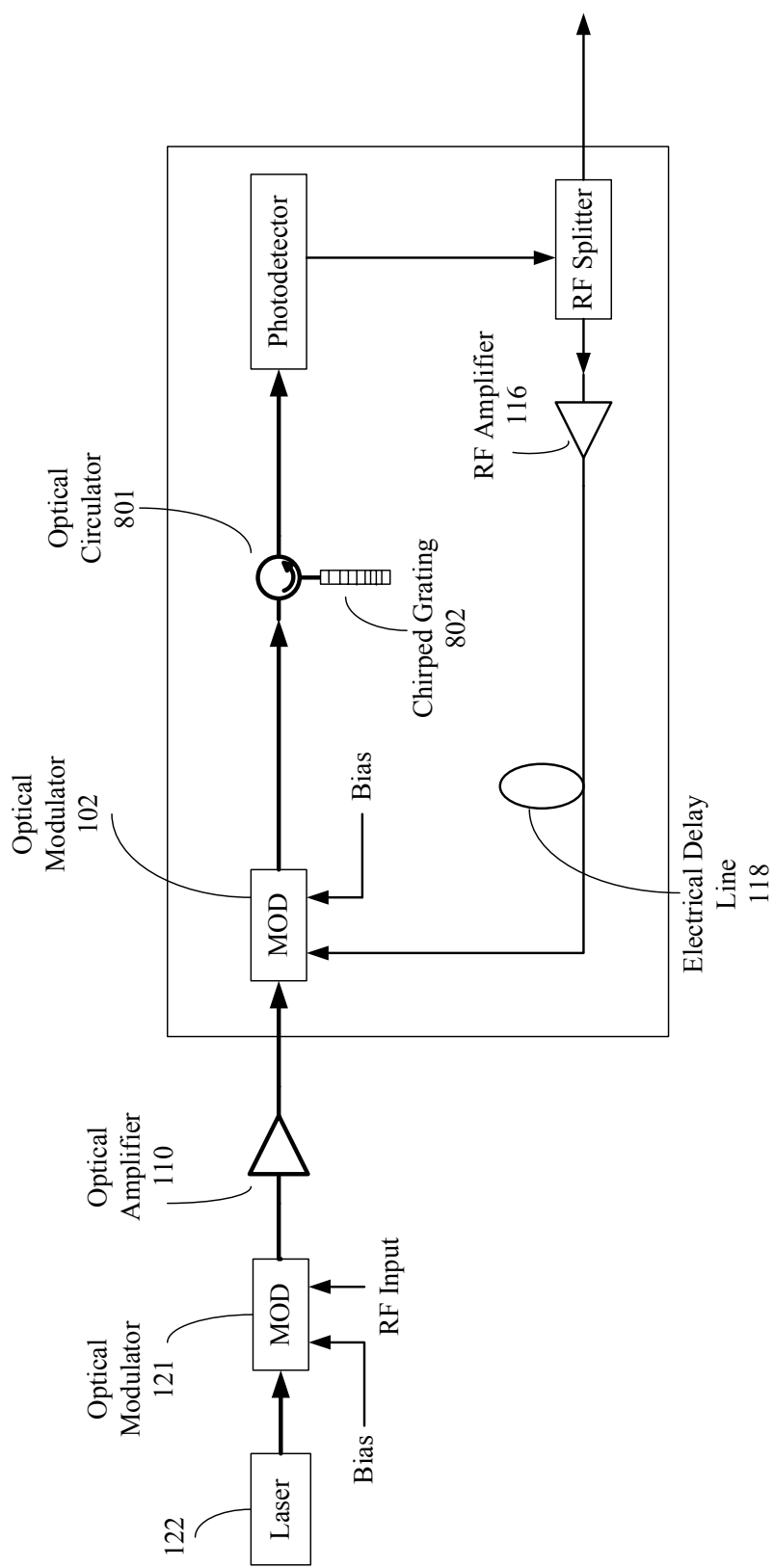
Measured filter response in the band of 0.5 – 1 GHz

FIG 6B



An alternative embodiment of the photonic microwave filter with infinite impulse response (IIR) using Electroabsorption modulator (EAM)

FIG 7



Another embodiment of the photonic microwave filter with infinite impulse response (IIR) using chirped grating

FIG. 8