Abstracts

Microwave-frequency conversion methods by optical interferometer and photodiode

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Frequency conversion in fiber-optic systems like subcarrier multiplexed (SCM) systems is now to be used in many applications for both digital and analog signals. The performance of two different optoelectronic configurations, both used for frequency conversion in the microwave frequency range, are compared here. In the first case, mixing is achieved by a Mach-Zehnder (MZ) interferometer, while in the second case, photodiode mixing is presented. Experimental investigations are presented at the optical wavelength of 1.3 /spl mu/m. In both cases, promising results have been achieved.

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