

# Abstracts

## All-optical RF filter using amplitude inversion in a semiconductor optical amplifier

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*F. Coppinger, S. Yegnanarayanan, P.D. Trinh and B. Jalali. "All-optical RF filter using amplitude inversion in a semiconductor optical amplifier." 1997 Transactions on Microwave Theory and Techniques 45.8 (Aug. 1997, Part II [T-MTT]): 1473-1477.*

We present an all optical delay-line radio-frequency (RF) notch filter. The filter exploits cross-gain modulation in a homogeneously broadened laser medium to obtain a negative tap in an optically incoherent system. Applications including moving-target indication (MTI) in optically controlled radars are discussed.

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