Abstracts

All-optical heterodyne RF signal generation using a mode-locked-laser frequency comb: theory and experiments

R.T. Logan, Jr.. "All-optical heterodyne RF signal generation using a mode-locked-laser frequency comb: theory and experiments." 2000 MTT-S International Microwave Symposium Digest 00.3 (2000 Vol. III [MWSYM]): 1741-1744.

Theoretical and experimental investigations are presented for a technique to synthesize signals with high phase stability from 1 GHz to 94 GHz by injection-locking two DFB diode lasers to individual modes of an actively mode-locked laser. An application is demonstrated in a photonic frequency-converting system at frequencies up to 94 GHz.

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