

# Abstracts

## Phase-locking of grid oscillators

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Wenzhang Wang and L. Wilson Pearson. "Phase-locking of grid oscillators." 1998 MTT-S International Microwave Symposium Digest 98.3 (1998 Vol. III [MWSYM]): 1879-1882.

In this paper, we report results of the first successful phase locking, to our knowledge, of a grid oscillator. A voltage controlled grid with a center frequency of 4.7 GHz and with 300 MHz electric tuning range was locked to a frequency synthesizer by way of a phase-locked loop (PLL). The loop was designed with 10 kHz bandwidth and employs three operational amplifiers. Phase noise was improved to match the specification of the synthesizer locking source.

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