# Abstracts

## Improvement of broadband feedforward amplifier using photonic bandgap

*Jinho Yoon and Chulhun Seo. "Improvement of broadband feedforward amplifier using photonic bandgap." 2001 Microwave and Wireless Components Letters 11.11 (Nov. 2001 [MWCL]): 450-452.*

In this paper, the photonic bandgap, the predistortion, and the secondary harmonic tuning are simultaneously employed in a feedforward amplifier to maximize the power added efficiency (PAE) and the operating bandwidth for in IMT-2000 band. In this case, the secondary harmonic tuning and the predistortion linearizer can cancel the second and the third harmonics, respectively. The PBG prevented any more harmonics appearing over 6 GHz. The feedforward amplifier was improved by 4%, and 15 dBc in the PAE and the IMD (intermodulation distortion), respectively. The operation bandwidth achieved was twice as wide as the conventional feedforward amplifier.

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