

# Abstracts

## **Step gain amplifier with impedance unchanged in gain control**

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*M. Tanabe, T. Fukuda and K. Nishii. "Step gain amplifier with impedance unchanged in gain control." 2002 Radio Frequency Integrated Circuits (RFIC) Symposium 02. (2002 [RFIC]): 209-212.*

A novel gain control method without impedance alternation in a gain control action has been developed. The method was based on the traditional current switch gain control scheme. A low gain mode has not only a DC feed-through as in the conventional method but also an RF feed-through with an RC network and a common-base transistor. An implemented differential Low Noise Amplifier exhibited the complete suppression of the impedance alternation effect. The details of the circuit topology are presented in this paper.

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