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(57) Abstract :
The invention relates to an improved circuit (100) for low-noise wireless communication receivers designed to enhance signal sensitivity and reduce interference. The circuit comprises an antenna input (101), an impedance-matching network (130), a low-noise amplifier (110), an adaptive filter (120), and a feedback noise suppression block (140). The amplifier (110) ensures high gain with minimal noise, while the filter (120) dynamically suppresses unwanted signals. The impedance-matching network (130) reduces reflection losses, and the feedback block (140) optimizes performance in real time. The invention provides high SNR, multi-band adaptability, and energy efficiency.

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