

PATENT NO. 387201
**SWITCHING POWER CONVERTER ADAPTED FOR IMPROVED OUTPUT
IMPEDANCE AND LOAD REGULATION THROUGH INDUCTOR**

APPLICATION NO. 795/KOL/2009

APPLICANT
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ABSTRACT

The present invention relates to switching power converters and, in particular, to system and method for improving load regulation, output impedance, line regulation, bandwidth and phase margin. This requires simply an additional filter circuit in series with the current sensor. The operation of the present scheme is similar to the voltage mode control along with the incorporation of the filtered current with ramp signal. The switching power converters as of the present invention is capable of retaining the improved line regulation, audio-susceptibility, bandwidth and phase margin of the current mode control, and in addition, it improves output impedance and load regulation. The achieved output impedance is much lower than that using the current mode control and similar to that of the voltage mode control with reduced resonant peaking at high frequency.

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CLAIM 1

Switching power converter comprising a power circuitry and a control circuitry; said control circuitry having a filter network in series with the current sensor adapted for improved output impedance and load regulation.