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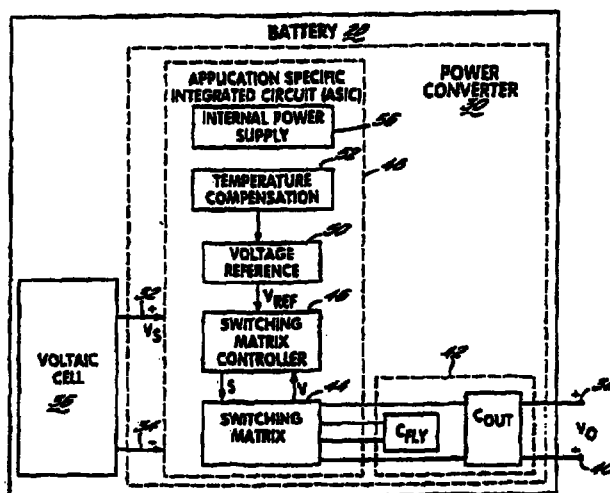
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(54) Title: DYNAMICALLY-SWITCHED POWER CONVERTER



(57) Abstract: A DC/DC power converter is efficiently switched to produce a predetermined output voltage across a load capacitor as required by a load device. In particular, a capacitive and/or inductive element is switched between a charge and discharge state as required to maintain the output voltage. For a capacitive-only power converter, or charge pump, comparison of the output voltage to a reference voltage efficiently switches a fly capacitor between charging and discharging states. Also, power converter based on switching of an inductive element with a synchronous rectifier and switch to charge the load capacitor is made more efficient by a hysteretic comparison of the output voltage to predetermined thresholds for stopping the Pulse Width Modulation (PWM) modulation when the predetermined output voltage is achieved. The power converters illustrated are suitable for integrated circuit implementation and may be combined with other elements of a battery to produce a more efficient battery, achieving longer service life and output voltage stability.

WO 01/01553 A1



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