

ABSTRACT

DEVICE AND METHOD FOR PROVIDING REGULATED CURRENT TO AN ELECTRICAL LOAD

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A device for providing regulated current to an electrical load comprising a current controller operable at predetermined intervals (clock cycles) to receive:- i. a desired input reference voltage; and ii. a feedback voltage
10 obtained from an electronic switch; wherein the current controller is operable to compare the feedback voltage with the desired input reference voltage and provide regulated current to the electrical load based on calculation of the switch off time of the electronic switch at each clock cycle; the calculation of the switch off time operable to achieve a continuous-conduction-mode (CCM)
15 for the device under normal operating conditions, is disclosed.

Fig. 1