



(43) International Publication Date
19 August 2004 (19.08.2004)

PCT

(10) International Publication Number
WO 2004/070926 A3

- (51) **International Patent Classification⁷:** G05F 1/652, 1/10, 1/656, 1/613, 3/16, 3/00, 1/40, 1/44, 1/56, 1/618

(21) **International Application Number:** PCT/US2004/003091

(22) **International Filing Date:** 3 February 2004 (03.02.2004)

(25) **Filing Language:** English

(26) **Publication Language:** English

(30) **Priority Data:**
60/444,568 3 February 2003 (03.02.2003) US
10/769,952 2 February 2004 (02.02.2004) US

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(81) **Designated States (unless otherwise indicated, for every kind of national protection available):** AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) **Designated States (unless otherwise indicated, for every kind of regional protection available):** ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

(88) **Date of publication of the international search report:** 14 April 2005

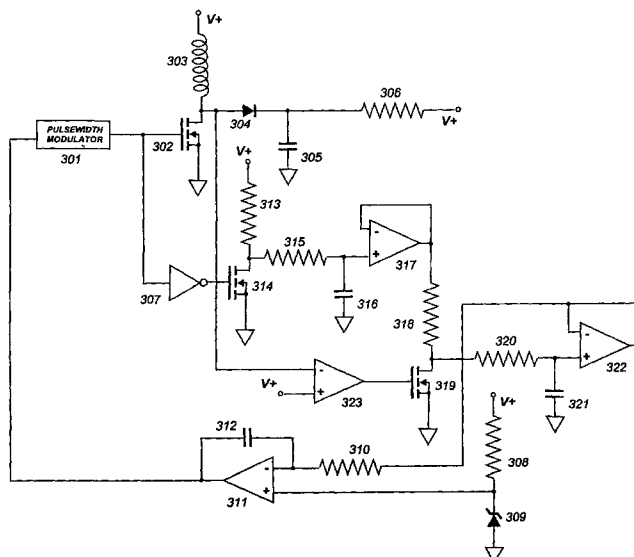
Published:

— *with international search report*

(88) Date of publication of the international search report: 14 April 2005

[Continued on next page]

- (54) Title:** IMPROVED METHOD OF DETECTING SWITCHING POWER SUPPLY OUTPUT CURRENT



- (57) Abstract:** A method according to the invention includes the steps of inferring the peak current through the inductor (303) as a function of input voltage and inductor charge time, and deriving the current available to the load based upon the flyback voltage during discharge of the inductor (303). In terms of apparatus, in a switching power supply of the type wherein a switching device (302) is used to charge an inductor (303) that discharges to a load, the invention provides devices arranged for detecting output current without the need for a resistor or other component in series with the load. In the preferred embodiment, these devices include electrical components operative to generate a signal indicative of peak inductor current, and a switch (302) for switching the signal to provide a waveform, the integral of which is proportional to peak inductor current multiplied by the duty cycle of the discharge of the inductor (303).

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