Title (en)

SWITCHING CONTROL CIRCUIT FOR PRIMARY-SIDE CONTROLLED POWER CONVERTERS

Title (de)

SCHALTSTEUERSCHALTUNG FÜR PRIMÄRSEITIG GESTEUERTE STROMUMSETZER

Title (fr)

CIRCUIT DE COMMANDE DE COMMUTATION DE CONVERTISSEURS DE PUISSANCE COMMANDEE DU COTE PRIMAIRE

Publication

EP 1943718 A4 20111012 (EN)

Application

EP 05795427 A 20051009

Priority

CN 2005001652 W 20051009

Abstract (en)

[origin: WO2007041894A1] The present invention discloses a switching control circuit for a primary-side controlled power converter. A voltage-waveform detector produces a voltage-feedback signal and a discharge-time signal. A current-waveform detector generates a current-waveform signal by measuring a primary-side switching current. An integrator generates a current-feedback signal by integrating the current-waveform signal with the discharge time. A time constant of the integrator is correlated with the switching frequency, thus the current-feedback signal is proportional to an output current of the power converter. A PWM circuit controls the pulse width of the switching signal in response to the outputs of a voltage-loop error amplifier and a current-loop error amplifier. The output voltage and the maximum output current of the power converter are therefore regulated.

IPC 8 full level

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CPC (source: EP KR)

H02M 3/22 (2013.01 - KR); **H02M 3/28** (2013.01 - KR); **H02M 3/33507** (2013.01 - EP); **H02M 3/33523** (2013.01 - EP)

Citation (search report)

- [XA] WO 2005011095 A1 20050203 - SYSTEM GENERAL CORP [CN], et al
- [A] US 2005073862 A1 20050407 - MEDNIK ALEXANDER [US], et al
- See references of WO 2007041894A1

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DE NL

DOCDB simple family (publication)

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CN 2005001652 W 20051009; EP 05795427 A 20051009; JP 2008533846 A 20051009; KR 20087010387 A 20051009