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- (71) Applicant: CIRRUS LOGIC, INC. [US/US]; 800 W. 6th Street, Austin, Texas 78701 (US).
- (72) Inventor; and
- (71) Applicant: HE, Zhaohui [CN/US]; #1132, 2301 S. Mo-pac Expressway, Austin, Texas 78746 (US).
- (74) Agent: CHAMBERS, Kent B.; Suite 3150, 8911 N. Capital of Texas Hwy., Austin, Texas 78759 (US).

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(54) Title: ADAPTIVE CURRENT CONTROL TIMING AND RESPONSIVE CURRENT CONTROL FOR INTERFACING WITH A DIMMER

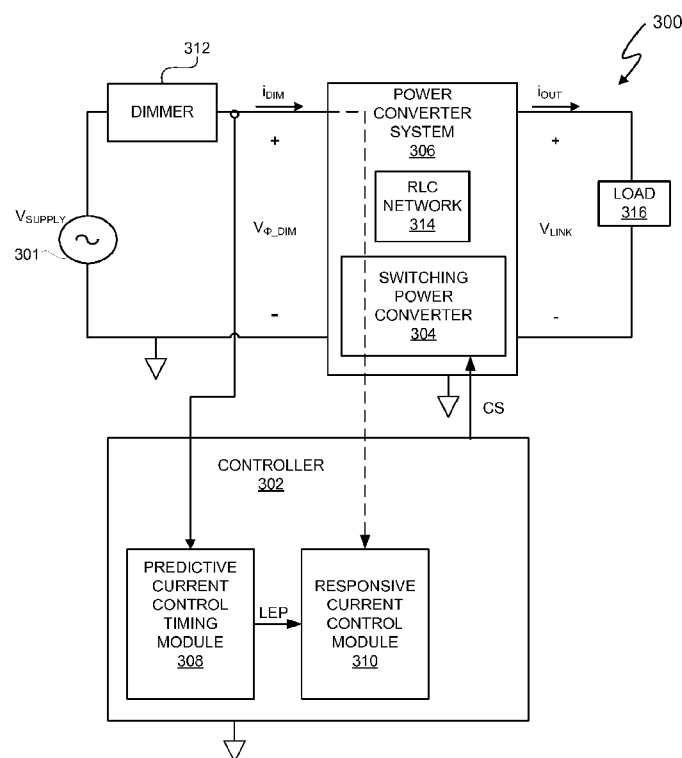


FIG. 3

(57) Abstract: In at least one embodiment, an electronic system adapts current control timing for half line cycle of a phase-cut input voltage and responsively controls a dimmer current in a power converter system. The adaptive current control time and responsive current control provides, for example, interfacing with a dimmer. The electronic system and method include a dimmer, a switching power converter, and a controller to control the switching power converter and controls a dimmer current. In at least one embodiment, the controller determines a predicted time period from a zero crossing until a leading edge of a phase-cut input voltage and then responsively controls the dimmer current to, for example, reduce current and voltage perturbations (referred to as "ringing"), improve efficiency, and reduce an average amount of power handled by various circuit components.

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INTERNATIONAL SEARCH REPORT

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B. FIELDS SEARCHED

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	EP 2 257 124 A1 (NXP BV [NL]) 1 December 2010 (2010-12-01) paragraphs [0009] - [0037] paragraphs [0060] - [0064] figures 3,5,7,8,12 -----	1-28
X	WO 2010/011971 A1 (CIRRUS LOGIC INC; KOST MICHAEL A [US]; GAETANO MAURO L [US]; MELANSON) 28 January 2010 (2010-01-28) figures 7-11 paragraphs [0049] - [0069] ----- -/-	1-28



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Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040,
 Fax: (+31-70) 340-3016

Authorized officer

João Carlos Silva

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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