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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

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[Continued on next page]

(54) Title: CONFIGURABLE TIME DELAYS FOR EQUALIZING PULSE WIDTH MODULATION TIMING

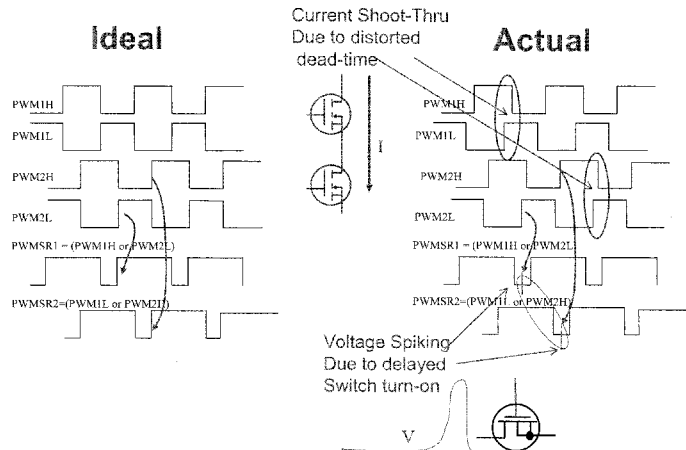


Figure 3

(57) Abstract: A plurality of PWM generators have user configurable time delay circuits for each PWM control signal generated therefrom. The time delay circuits are adjusted so that each of the PWM control signals arrive at their associated power transistors at the same time. This may be accomplished by determining a maximum delay time of the PWM control signal that has to traverse the longest propagation time and then setting the delay for that PWM control signal to substantially zero delay. Thereafter, all other delay time settings for the other PWM control signals may be determined by subtracting the propagation time for each of the other PWM control signals from the longest propagation time. Thereby insuring that all of the PWM control signals arrive at their respective power transistor control nodes with substantially the same time relationships as when they left their respective PWM generators.

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A. CLASSIFICATION OF SUBJECT MATTER  
 INV. H02M1/32 H02M1/38 H02M1/08  
 ADD. H02M3/335

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
 H02M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
 EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2009/160412 A1 (LATHAM PAUL W [US] ET AL LATHAM II PAUL W [US] ET AL) 25 June 2009 (2009-06-25)	1-6,12,13,16,17
Y	figures 4,5a paragraphs [0001], [0003], [0020], [0021], [0025] - [0029], [0034], [0036], [0038], [0040]	7-11,14,15
X	DE 10 2008 022923 A1 (SIEMENS AG [DE]) 19 November 2009 (2009-11-19)	1-6
Y	figures 1-5 paragraphs [0005], [0006], [0009], [0010], [0013], [0025], [0026]	7-11,14,15
X	US 2005/110475 A1 (CHAPUIS ALAIN [US]) 26 May 2005 (2005-05-26)	14,15
Y	figure 2 paragraph [0025]	7-11,14,15
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Further documents are listed in the continuation of Box C.

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Date of the actual completion of the international search  27 August 2014	Date of mailing of the international search report  04/09/2014
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 10 2010 063046 A1 (HUETTINGER ELEKTRONIK GMBH [DE]) 14 June 2012 (2012-06-14) figures 1,2,3 paragraphs [0011], [0012], [0022], [0026], [0027], [0029], [0030], [0031] -----	1-17

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Information on patent family members

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