



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	2014_PSIJ_9905
Title of the Manuscript:	A Proposed Modified Constant Frequency Variable Duty PWM Based Speed Control Technique for DC Motor Drives: A New Method to Achieve More Precise Control over Speed
Type of the Article	Original Research Article

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This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments		
<u>Minor</u> REVISION comments	The authors present an interesting application on modified CFVD PWM control over DC motors. My comments are: 1) Line 29; replace KHz with kHz (also in the rest text if I have missed it). 2) Lines 30-34; the authors neglect the switching losses of the transistors. They have to clarify that they are not zero but they are much lower than the losses in linear supplies. Add also some references on this issue (e.g. Mohan book on power electronics). 3) Line 101; I think that this sentence needs editing. 4) Lines 139-141; the authors report that narrow pulses during small duty cycles may be avoided, but this is not seen in figure 2. This advantage has to become clear in the example of figure 2.	1. All the KHz are replaced by kHz throughout the revised paper. 2. The point of nonzero power losses within switching elements have mentioned in the lines pointed out by the reviewer. Proper reference has also been added in support of this fact. 3. The pointed out sentence have been corrected in the revised paper. 4. Figures 2 (a) – (d) show the narrow pulses during small duty cycle (10%). For smaller duty cycles ($d_c \leq 10\%$), gradual periodic increase and decrease in the amplitude of the consecutive narrow pulses (Figures 2 (a) – (d)), possibility of abrupt mechanical shocks on the armature rotating in lower speed may be avoided, which intern leads to achieve longer life of DC motors. This fact is added in the revised paper.
<u>Optional/General</u> comments		