



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

General guideline for Peer Review process:

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.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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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	Please show the comparison between those by conventional algorithm and by proposed one for transient speed control characteristics.	The comparison between those by conventional algorithm and by proposed one for transient speed control characteristics have been reflected in Fig. 9 by means of bar graphs. In average, around 20 ms smaller settling time during rise or decay of speed for different speed range has been achieved by changing the peak amplitude of the extra control signal keeping duty cycle fixed as compared to changing the duty cycle keeping peak amplitude of the extra control signal fixed, which in turn shows better transient response of the proposed method than its conventional counterpart. This fact is also added in the 'Conclusion' section.
<u>Minor</u> REVISION comments	It is better to consider loading in speed control.	In the present paper authors did not presented the speed control characteristics of the DC motor under loaded condition. It may be regarded as the future scope of study of the present one. However presently they are involved in experimental studies on the speed control of DC motor under loaded condition which may be presented in some other paper in near future.



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<u>Optional/General</u> comments	What is electronic breaking characteristics? Is it possible to implement the proposed algorithm by digital circuits?	By “Electronic breaking characteristics”, the authors meant that, the study of time required for breaking for different speed ranges. Those are given in Table 2 and 3 by means of proposed and conventional respectively. The proposed algorithm can be implemented via appropriate digital signal processor. However authors yet not been studied this thing. Authors are taking this comment as their future scope of study.
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