



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	Ms_PSIJ_22868
Title of the Manuscript:	Spectrum Diagnostics of a Damaged Differential Planetary Gear during Various Operating Conditions
Type of the 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>)



SDI Review Form 1.6

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	<p>In the paper are discussed the vibration spectra and fault indicators of a ubiquitous multi-input industrial differential planetary design that includes tooth damage.</p> <p>The article is written very well with high grade of scientific and technical erudition. It can be classified as original scientific paper; it contains a contribution to the scientific area; style and language are corresponding, so in my opinion the paper is acceptable for publishing in Physical Science International Journal.</p>	Thanks for the reviewer's comments. We really appreciate it.
<u>Minor</u> REVISION comments	<p>I didn't find the substantial weaknesses in the article. However, I have some notes and questions:</p> <ul style="list-style-type: none"> - the bottom part of the Fig. 1 is not readable and clear, - in my opinion, the unit for torque should be written in the form "Nm / Nmm", no as author(s) used "N-m / N-mm", - the quality of the graphs in Figures 2, 3, 4 and 8 is not good (in my file), - which numbers of figures are listed in the first column of the Tab. 4? - page 10, 2nd paragraph, line 2nd - Are really the predicted frequencies calculated in Tab. 3? - page 14, 2nd paragraph, line 5th - the value 695 Hz is not listed in Table 3, - Table 6 - Are really the frequencies in Tab. 6 of Fig.9? - Please check other references for tables and figures ... 	Again, thanks for the reviewer's detail valuable feedback. We already replaced the poor-quality figures by quality ones and deleted some figures which are not necessary and renumbered them. The units are Nm and Nmm now. Earlier revisions of this paper included additional figures in Section 4 and 5. These figures were deleted for clarity prior to submission. Table 4 has also been deleted as was the original intention. The tables are corresponding to correct figures now. The reason why the value 695 Hz is not listed in Table 5 is because it is not harmonics of Gear mesh frequencies. However, At 760 ms the second harmonic of the <i>fixed axis</i> gear mesh GMF_{12} is identified as the largest peak at 650 Hz. This important phenomenon can only be observed in 3D JTFA plot, which is the highlight of this paper.
<u>Optional/General</u> comments	I recommend article publishing after minor revision.	