

Title: High-frequency inverter ripple

Generated on: 2026-05-07 10:11:54

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In this paper, we propose a ripple reduction method that reduces the effect of the voltage ripple of an inverter controller by detecting the 120 Hz voltage ripple using the Goertzel algorithm. The proposed ...

This paper analyzes Step Density Modulation (SDM) technique for high-frequency inverters in Wireless Power Transfer (WPT) systems for Electric Vehicle (EV) charging.

A prototype of a battery cycling tester capable of high frequency and precise ripple current generation was developed and is used to cycle cells with superimposed ripple currents within an aging study.

Another integral component in the power architecture is the traction inverter, which is necessary to convert the battery's DC output to AC to power the EV motor. The traction inverter creates unwanted ...

ject high-frequency ripple into high-voltage systems under load. It is ideal for traction inverters, battery storage systems, and p. wer-HIL environments that require both.

This paper presents a detailed review of the design aspects and performance analysis of high-frequency inverters used in inductive power transfer application (IPT) for electric vehicles.

This paper analyses Step Density Modulation (SDM) techniques for high-frequency inverters in Wireless Power Transfer (WPT) systems for Electric Vehicle (EV) cha

Techniques and novel components for improving the performance of bidirectional variable frequency soft-switching three-phase grid-tied inverters were explored. These techniques were then tested in ...

Electric vehicle HV bus overview and inverter ripple High voltage ripple occurs on high voltage bus during propulsion and regeneration as a result of inverter's (PIM) operation.

This paper documents an experimental investigation that studies the long-term impact of current ripple on



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battery performance degradation. Initial results highlight that both capacity fade and ...

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