NEUTRAL POINT TYPE BUCK CONVERTER CIRCUIT APPLICATION FOR SHORT RANGE WIRELESS ENERGY TRANSFER

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UNIVERSITI TEKNOLOGI MARA

MALAYSIA

NURUL IZZATI BINTI ROSTAM

2011251298

Faculty of Electrical Engineering

UNIVERSITI TEKNOLOGI MARA

40450 SHAH ALAM, SELANGOR DARUL EHSAN

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ABSTRACT

Nowadays, wireless energy transfer that known as wireless power transfer most popular and wide range of applications. In this thesis, the Neutral Point Type Buck converter is introduced to determine the circuit efficiency and capability for short range wireless application. This circuit consists of two parts and there are Buck Chopper Converter circuit and Half-wave Rectification Chopper circuit. The neutral point type buck converter can be designed with switching of the half bridge switches. The operation of converter are discussed and examined by its characteristics. The Magnetic Resonance Coupling method applied for Wireless Energy Transfer to transmit power with high frequency across large air gap and greater distance can be obtained**.** This circuit consists of sending circuit and receiver circuit to be coupling circuit. This part is the heart of the entire system as the actual wireless power transfer is carried out [1]. The circuit developed by using PSIM software to get the output waveform.

TABLE OF CONTENTS