

Plugless Chargin of Electric Vehicle

End of Semester Defense

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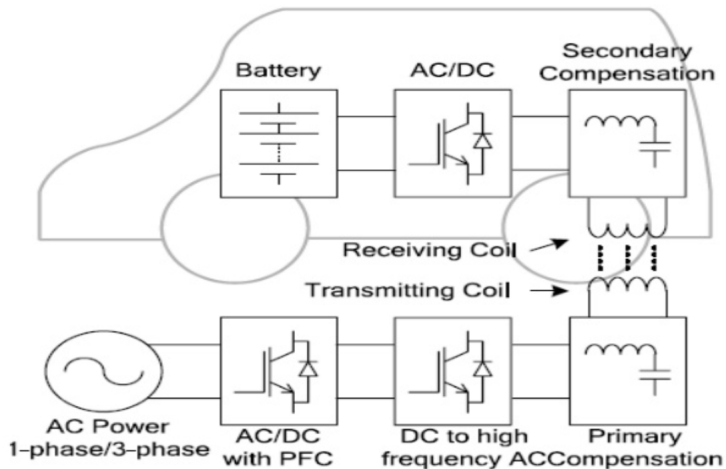
March 12, 2020

Introduction

Problem Identification

Objective

Block Diagram



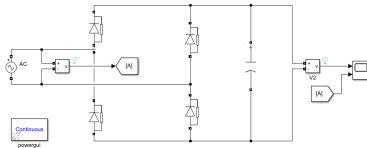
Typical wireless EV charging system.

Design of each individual component was completed. Following components were designed

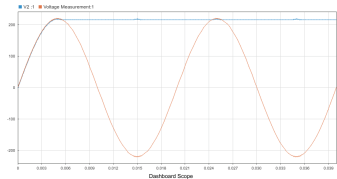
- Rectifier
- High frequency inverter
- Receiver-Transmitter Coil
- Buck Converter

Rectifier

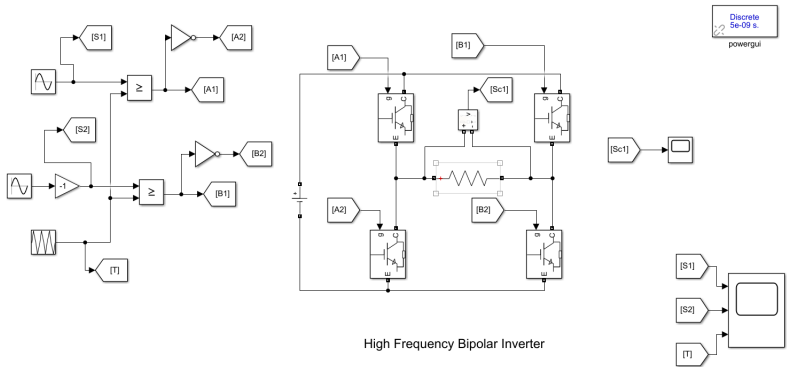
220 V Ac supply was converted into DC voltage using bridge rectifier. Capacitor was used to smoothen the pulsating DC voltage .



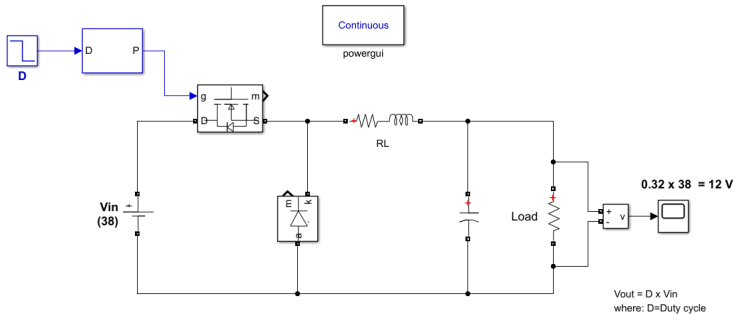
RECTIFIER



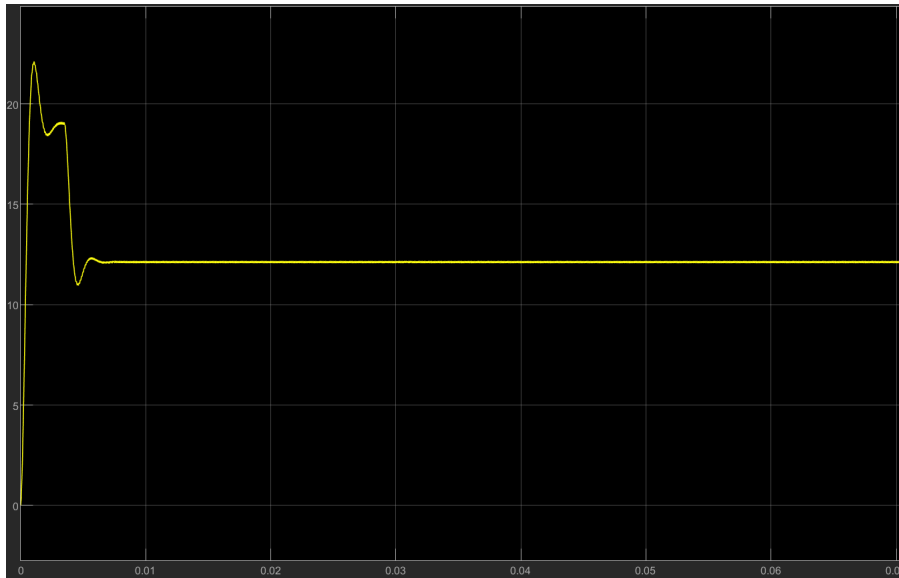
High Frequency Inverter



buck converter



buck converter



Remaining Work for Next Semester

- High frequency analysis of receiver transmitter coil using Ansys Maxwell
- Hardware realization of prototype of simulated model

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