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(71)**Name of Applicant :**
1)Andhra University
Address of Applicant :Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Allam Venkatesh
Address of Applicant :Research Scholar, Department of Electrical Engineering, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
2)Dr. B. Amarendra Reddy
Address of Applicant :Associate Professor, Department of Electrical Engineering, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
3)Prof. T. R. Jyothsna
Address of Applicant :Professor, Department of Electrical Engineering, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
4)CH. Nayak Bhukya
Address of Applicant :Research Scholar, Department of Electrical Engineering, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
5)Mrs. Lakshmi Prasanna
Address of Applicant :Research Scholar, Department of Electrical Engineering, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
6)Mohamad Ahmad Shouki Abed
Address of Applicant :Research Scholar, Department of Electrical Engineering, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------

(57) Abstract :
ABSTRACT: Title: A Dual-Input Lower-Order High-Gain DC-DC Power Converter for Electric Vehicle Charging Applications The present disclosure proposes a dual-input integrated dc-dc power converter (100) for a charging station application which caters needs of multiple light electric vehicles (LEVs) by providing different levels of voltages based on selective applications, thereby minimizing cost and complexity while enhancing efficiency and reliability. The dual input integrated dc-dc power converter (100) comprises a first input source (102A) and a second input source (102B), plurality of energy storage elements (104A, 104B, 106A, 106B), plurality of switching elements (108A, 108B, 108C), plurality of diodes (110A, 110B, 110C) and a controller (114). The proposed integrated power converter (100) provides a more convenient and seamless charging experience for users, thereby enhancing user experience due to its adaptability to different EV types. The proposed integrated power converter (100) is economical and easy to operate.

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