**BRAILLE PATTERN BASED MOBILE OPERATING SYSTEM FOR BLIND AND VISUALLY IMPAIRED PEOPLE**

**A PROJECT REPORT**

*Submitted by*

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**BONAFIDE CERTIFICATE**

Certified that this project report **“BRAILLE PATTERN BASED MOBILE OPERATING SYSTEM FOR BLIND AND VISUALLY IMPAIRED PEOPLE”** is the bonafide work of **“ANANDHAMOORTHY.J (421111104003)”** who carried out the project work under my supervision

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**ABSTRACT**

This project presents about hysteresis control of STATCOM for distributed renewable energy source application. The main aim is to explore interaction between power semiconductors connecting to weak distribution network using renewable source of energy and non-linear load compensation. In my project three types of energy sources are used. Type I photovoltaic panel, Type II wind energy and Type III fuel cell. Most of distributed generation system would operate near to unity power factor and supply real power to the grid. By using hysteresis current controller, inverter is actively controlled to compensate the harmonics, reactive power and imbalance on three-phase system with distributed renewable power injection into grid.

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**LIST OF ABBREVATIONS**

AC - Alternating Current

APF - Active Power Filter

BESS - Battery Energy Storage System

DC - Direct Current

DER - Distributed Energy Resources

DG - Distributed Generation

emf - Electromotive Force

FACTS - Flexible AC Transmission System

HB - Hysteresis Bandwidth

HCC - Hysteresis Current Controller

IEC - International Electro technical Commission

IEEE - Institute of Electrical and Electronics Engineers

MPP - Maximum Power Point

PAFC - Phosphoric acid fuel cell

PCC - Point of Common Coupling

PEMFC - Proton Exchange Membrane Fuel cell

PQ - Power Quality

PV - Photovoltaic

PWM - Pulse width Modulation

RES - Renewable Energy Sources

SIM - SIMulation

THD - Total Harmonics Distortion

VSI - Voltage Source Inverter