

## **Recent Patents**

1. Mohammed, et. Al., "Sequence Hopping Algorithm for Securing GOOSE Messages," (US 9,894,080), United States Patent and Trademark Office (USPTO). Awarded Feb.13, 2018
2. Mohammed, et. al. "Systems and Techniques for Energy Storage Regulation," (US 20170070073), United States Patent and Trademark Office (USPTO). Awarded Aug. 15, 2017
3. Mohammed, et. Al., "A Flexible, Secure Energy Management System," (US 9,915,965 B2), United States Patent and Trademark Office (USPTO). Awarded Mar. 13, 2018
4. Ahmed S. Mohamed, and Osama Mohammed, "Autonomous Two-layer Predictive Controller for Bidirectional Inductive Power Transfer in EV Applications," USPTO 15/848,470, filed on December 2017.
5. Ahmed S. Mohamed, and Osama Mohammed, "Integrated Bidirectional Inductive/Conductive Electrical Apparatus," USPTO 15/848,445, filed in December, 2017.
6. Hany F. Habib, Tarek Youssef, and Osama Mohammed, "Methods and Techniques for Protection of Microgrid Energy Management System with Distributed Storage", Patent Filed February 2018.
7. Abla Hariri, Mohamad El Hariri, Tarek Youssef, and Osama Mohammed "Internet of Electric Vehicle Decision-Support System for Public Charging of EVs," patent Filed March 2018
8. Nour Elsayad and Osama Mohammed "A Three-Phase Inverter System using An Eight-Switch-Three-Phase Unfolder," Patent Filed November 2017.
9. Nour Elsayad, Mehdi Shojaie and Osama Mohammed "A Power Electronic Building Block Using Series-Stacked Gallium-Nitride HEMTs", Patent Filed February 2018.
10. Nour Elsayad, Mehdi Shojaie and Osama Mohammed "Multi-Drain Gallium-Nitride Module with Multiple Voltage Ratings", patent Filed February 2018.
11. Hadi Moradisizkoochi, Nour Esayad and Osama Mohammed "A Family of Modular Quasi-Resonant Inverters", Patent Filed February 2018.