A. Patent Filed

(I)

1. **Title:** A NOVEL CASCASED MULTILEVEL ISOLATED BIDIRECTIONAL DC-DC CONVERTER AND ITS OPERATION THEREOF
2. **Contributors/Inventors:** Rajesh Gupta and V. Karthikeyan
3. **Application no:** 201611034814
4. **Date of Filing:** 12/10/2016
5. **Date of Publication:** 21/10/2016

(II)

1. **Title:** A MODULAR HYBRID CONVERTER FOR GENERATING MULTIPLE DIRECT CURRENT OUTPUTS AND SINGLE MULTILEVEL ALTERNATING CURRENT OUTPUT
2. **Contributors/Inventors:** Rajesh Gupta and P. C. D. Goud
3. **Application no:** 202011048237
4. **Date of Filing:** 04/11/2020
5. **Date of Publication:** 20/11/2020

(III)

1. **Title:** A PORTABLE PHOTOVOLTAICS POWERED STANDALONE HYBRID POWER SUPPLY SYSTEM WITH MULTI-PORT CONNECTIVITY FOR DISINFECTION DEVICES
2. **Contributors/Inventors:** Rajesh Gupta, Ajeet Kumar Bhardwaj, Anil Kumar, Aman Kumar
3. **Application no:** 202111046806
4. **Date of Filing:** 13/10/2021
5. **Date of Publication:** 29/10/2021

(IV)

1. **Title:** AN AC-DC-DC/AC BOOST DERIVED HYBRID CONVERTER WITH INPUT POWER FACTOR CORRECTION
2. **Contributors/Inventors:** Rajesh Gupta, Sandeep Ojha
3. **Application no:** 202311023613
4. **Date of Filing:** 30/03/2023
5. **Date of Publication:** 26/05/2023

B. List of Publications

I. Journal Publications

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9. Alok Agrawal and R. Gupta, "Coordinated Control of Hybrid DERs Enabled Grid-Interactive Residential PCM With Hybrid Bus Layout," ***IEEE Systems Journal***, vol. 16, no. 3, pp. 4607-4618, Sept. 2022.
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11. Chandra Sekhar Nalamati, Niranjan Kumar and Rajesh Gupta, “Multidirectional power flow in three-port isolated DC-DC converter for multiple battery stacks”, ***Turk J Elec Eng & Comp Sci***, vol. 29, pp. 756 – 772, March 2021.
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2. Kumari Priya, Manas Kumar and Rajesh Gupta, "EV Battery Charging System via Reconfigurable Boost Converter with Solar PV and Grid", *11th National Power Electronics Conference (NPEC 2023)*, 14-17 Dec. 2023, IIT Guwahati , India.
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12. Vishal Jain and Rajesh Gupta, “Sampling effect in SPS modulation for power flow control in series resonant DAB converter”, IEEE PEDES-2022, MNIT Jaipur, India, 14 – 17 Dec. 2022.
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