

पेटेंट कार्यालय
शासकीय जर्नल

**OFFICIAL JOURNAL
OF
THE PATENT OFFICE**

निर्गमन सं. 17/2022
ISSUE NO. 17/2022

शुक्रवार
FRIDAY

दिनांक: 29/04/2022
DATE: 29/04/2022

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

(54) Title of the invention : A MITIGATION OF CONGESTION USING TCPAR FACTS CONTROLLER

(51) International classification :H02J0003180000, H02J0003240000, H02J0050120000, H02J0003360000, F02D0001180000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)Name of Applicant :
1)Mrs. Madhvi Gupta
 Address of Applicant :Assistant Professor, Department of Electrical Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244002 -----
2)Mr. Ankit Agarwal
3)Dr. Hitesh Joshi
4)Mr. Shalabh Gaur
5)Mrs. Swati Singh
6)Ms. Kanchan Singh
 Name of Applicant : NA
 Address of Applicant : NA

(72)Name of Inventor :
1)Mrs. Madhvi Gupta
 Address of Applicant :Assistant Professor, Department of Electrical Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244002 -----
2)Mr. Ankit Agarwal
 Address of Applicant :Assistant Professor, Department of Electrical Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244002 -----
3)Dr. Hitesh Joshi
 Address of Applicant :Assistant Professor, Department of Electrical Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244002 -----
4)Mr. Shalabh Gaur
 Address of Applicant :Assistant Professor, Department of Electrical Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244002 -----
5)Mrs. Swati Singh
 Address of Applicant :Assistant Professor, Department of Electrical Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244002 -----
6)Ms. Kanchan Singh
 Address of Applicant :Assistant Professor, Department of Electrical Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244002 -----

(57) Abstract :
 The present invention relates to a mitigation of congestion using the TCPAR FACTS controller (100). The TCPAR FACTS controller (100) comprises a testing unit configured to measure the voltage magnitude of the buses, a thyristor controlled phase angle regulator (102) operationally connected with the testing unit, and a set of transformer (104) operationally connected with the testing unit and the thyristor controlled phase angle regulator (102). The thyristor-controlled phase angle regulator is shunt connected with the transformer (104). The thyristor-controlled phase angle regulator is configured to manage the phase angle of sending-end bus voltage clockwise or receiving-end bus voltage in an anti-clockwise direction. The TCPAR FACTS controller (100) reduces the phase difference between the sending-end bus voltage and receiving-end bus voltage without affecting voltage magnitude to decrease line current and congestion is mitigated.

No. of Pages : 24 No. of Claims : 8