

पेटेंट कार्यालय  
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पेटेंट कार्यालय का एक प्रकाशन  
PUBLICATION OF THE PATENT OFFICE

(54) Title of the invention : A SYSTEM FOR OVER-CURRENT AND OVER-VOLTAGE PROTECTION OF TRANSFORMER UNIT BY USING MICRO CONTROLLER

<p>(51) International classification :H02H0003093000, H02H0003080000, H02H0007220000, H02H0003200000, H01H0071120000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Mr. Ankit Agarwal</b> Address of Applicant :Assistant Professor, Department of Electrical Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----</p> <p><b>2)Mrs. Madhvi Gupta</b></p> <p><b>3)Dr. Hitesh Joshi</b></p> <p><b>4)Dr. Puneet Khanna</b></p> <p><b>5)Mrs. Swati Singh</b></p> <p><b>6)Mr. Shalabh Gaur</b></p> <p><b>7)Dr. Neelu Trivedi</b></p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Mr. Ankit Agarwal</b> Address of Applicant :Assistant Professor, Department of Electrical Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----</p> <p><b>2)Mrs. Madhvi Gupta</b> Address of Applicant :Assistant Professor, Department of Electrical Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----</p> <p><b>3)Dr. Hitesh Joshi</b> Address of Applicant :Assistant Professor, Department of Electrical Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----</p> <p><b>4)Dr. Puneet Khanna</b> Address of Applicant :Associate Professor, Department of Electronics &amp; Communication Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----</p> <p><b>5)Mrs. Swati Singh</b> Address of Applicant :Assistant Professor, Department of Electronics &amp; Communication Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----</p> <p><b>6)Mr. Shalabh Gaur</b> Address of Applicant :Assistant Professor, Department of Electrical Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----</p> <p><b>7)Dr. Neelu Trivedi</b> Address of Applicant :Professor, Department of Electronics &amp; Communication Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----</p>
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(57) Abstract :  
The present invention relates to a system (100) for over-current and over-voltage protection of transformer unit by using micro controller. The system (100) comprises a transformer unit, a current sensing unit (106), a voltage sensing unit (108), a temperature sensing unit (110), one or more solid state relays (SSR), an analog to digital unit, and microcontroller unit (112). The microcontroller unit (112) is configured to receive the detected information by the current sensing unit (106), voltage sensing unit (108) and temperature sensing unit (110); analyze the receive information; generate the tripping signal on detection of value of current, voltage, and temperature exceed from a predefined threshold value; and send the tripping signal to the one or more solid state relays (SSR) to trip the transformer unit.

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